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PRODUCT CATALOG



COMPLETE DISCRETE SEMICONDUCTOR SOLUTIONS

POWERED BY SERVICE

2020

2020

COMPANY PROFILE

Our Mission-To surpass our customers expectations in quality, cost, and delivery through superior customer service and continuous product improvement.

Founded in 1991, Micro Commercial Components Corp. (MCC) is a manufacturer of high-quality discrete semiconductors to the consumer markets. MCC's products include diodes, rectifiers, transistors, MOSFETs, voltage regulators and protection devices.

- Headquarter is located at Simi Valley, California
- Has extensive marketing and sales network throughout the world
- Warehouses in Chatsworth and Taipei
- Engineering, technical support and logistic office in Suzhou
- Main manufacturing facility in Yangzhou. The facility is IATF 16949:2016 , ISO 9001:2015 certified

Customer Inquiries: sales@mccsemi.com

Technical Support: techsupport@mccsemi.com

Green Program (REACH/ROHS/Halogen Free) Assistance:green@mccsemi.com

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ISO/IATF Certifications

ISO 9001



Certificat

Certificate

N° 2016/71177.2

AFNOR Certification certifie que le système de management mis en place par:
AFNOR Certification certifies that the management system implemented by:

JIANGSU MICRO COMMERCIAL COMPONENTS CORP
江苏美微科半导体有限公司

Unified Social Credit Code / Code Crédit Social Unifié / 统一社会信用代码 : 91321000331115910D

for the following activities:
pour les activités suivantes:

DESIGN AND MANUFACTURING OF DISCRETE SEMICONDUCTORS.
半导体分立元器件的设计和制造

has been assessed and found to meet the requirements of:
a été évalué et jugé conforme aux exigences requises par :

ISO 9001 : 2015

and is developed on the following locations:
et est déployé sur les sites suivants :

No.6 West Heye Road, Weyang Economic Development Zone, Hanjiang District, Yangzhou, Jiangsu, China
中国江苏省扬州市江都区韩江路西6号

Support Function: Sales 销售 Contract Review 合同评审 Product Design 产品开发 Process Design 过程设计
Logistics 物流 Customer Service 客户服务 Strategic Planning 战略规划 Management Review 管理评审
Internal Audit Management 内部审核 Continuous Improvement 持续改进 Human Resources 人事
Information Technology 信息技术 Calibration 校准 Purchasing 采购 Warehousing 仓储 Testing 测试 Laboratory 实验室

YANGZHOU YANGJIE ELECTRONIC TECHNOLOGY CO., LTD. 扬州扬杰电子科技股份有限公司
Head Office: NO.36, Middle of Chuangyeyuan Road, Hanjiang District, Yangzhou, Jiangsu, CHINA
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This certificate is valid from (year/month/day) 2018-05-22 Until 2021-05-21
Ce certificat est valable à compter du (année/mois/jour)



Franck LEBEUGLE
Managing Director of AFNOR Certification
Directeur Général d'AFNOR Certification



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IATF 16949



Certificat

Certificate

N°40036-3
N° IATF : 0306523

AFNOR Certification certifie que le système de management mis en place par :
AFNOR Certification certifies that the management system implemented by:

JIANGSU MICRO COMMERCIAL COMPONENTS CORP
江苏美微科半导体有限公司

pour les activités suivantes :
for the following activities:

DESIGN AND MANUFACTURING OF DISCRETE SEMICONDUCTORS.
半导体分立元器件的设计和制造

a été évalué et jugé conforme aux exigences requises par :
has been assessed and found to meet the requirements of:

IATF 16949 : 2016

Sans l'exclusion du chapitre 8.3 de la spécification technique.
Without the exclusion of chapter 8.3 of the technical specification.

et est déployé sur les sites suivants :
and is developed on the following locations:

No.6 West Heye Road, Weyang Economic Development Zone, Hanjiang District, Yangzhou, Jiangsu, China
中国江苏省扬州市江都区韩江路西6号

Liste complémentaire des sites supports entrant dans le périmètre de la certification en annexe
Complementary list of support functions within the certification scope on appendix

Ce certificat est valable à compter du (année/mois/jour) 2018-05-22 Jusqu'au 2021-05-21
This certificate is valid from (year/month/day)



Franck LEBEUGLE
Director General of AFNOR Certification
Managing Director of AFNOR Certification



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MOSFETs

- * Low Rds(on) Device 20V~100V
- * High Voltage Type 800V
- * Popular DFN Packages
- * SJ & Power MOSFET

MOSFETs 2

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MOSFETS

New Products

SJ MOSFETS

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Status
			P_D (W)	V_{DS} (V)	V_{GS} (V)	I_D (A)	$R_{DS(ON)}$ (Ω) @10V	$R_{DS(ON)}$ (Ω) @4.5V	$R_{DS(ON)}$ (Ω) @2.5V	$V_{GS(th)}$ (V)	$V_{GS(th)}$ (V)	C_{iss} (pF)		
MSJP11N65	TO-220AB(H)	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Active
MSJU11N65	DPAK	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Active
MSJPF11N65	TO-220F	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Active
MSJW20N65	TO-247	N	151	650	±30	20	0.17	-	-	2.5	4.5	1724	No	Active
MSJP20N65	TO-220AB(H)	N	151	650	±30	20	0.17	-	-	2.5	4.5	1724	No	Active

New Products

Power MOSFETS

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Status
			P_D (W)	V_{DS} (V)	V_{GS} (V)	I_D (A)	$R_{DS(ON)}$ (Ω) @10V	$R_{DS(ON)}$ (Ω) @4.5V	$R_{DS(ON)}$ (Ω) @2.5V	$V_{GS(th)}$ (V)	$V_{GS(th)}$ (V)	C_{iss} (pF)		
MCAC80N045Y	DFN5060	N	70	45	±20	80	0.0039	0.005	-	1	2	2554	No	Active
MCAC10H04Y	DFN5060	N	80	40	±20	100	0.0018	0.0023	-	1	2	5059	No	Active
MCAC10H045Y	DFN5060	N	80	45	±20	100	0.0018	0.0023	-	1	2	5106	No	Active
MCAC70N06Y	DFN5060	N	75	60	±20	70	0.0055	-	-	2	4	-	No	Active
MCAC50N06Y	DFN5060	N	70	60	±20	50	0.01	-	-	1	3	-	No	Active
MCAC80N06YA	DFN5060	N	80	60	±20	80	0.0033	-	-	1	3	-	No	Active
MCB85N06Y	D2-PAK	N	85	60	±20	85	0.013	-	-	1	2.4	2498	No	Active
MCAC40N10YA	DFN5060	N	70	100	±20	40	0.012	-	-	2	4	1684	No	Active
MCAC45N10Y	DFN5060	N	75	100	±20	45	0.0085	0.013	-	1	3	2240	No	Active
MCB100N15Y	TO-263	N	137	150	±25	100	0.0072	-	-	-	-	-	No	Sample Ready
MCP100N15Y	TO-220AB(H)	N	137	150	±25	100	0.0072	-	-	-	-	-	No	Sample Ready
MCPF100N15	TO-220F	N	137	150	±25	100	0.0072	-	-	-	-	-	No	Sample Ready
MCPF70N150	TO-220F	N	125	150	±25	70	0.019	-	-	-	-	-	No	Sample Ready
MCP70N150	TO-220AB(H)	N	125	150	±25	70	0.019	-	-	-	-	-	No	Sample Ready
MCB70N150Y	D2-PAK	N	125	150	±25	70	0.019	-	-	-	-	-	No	Sample Ready
MCG10N15A	DFN3030-8	N	3	150	±25	10	0.065	-	-	2	4	-	No	Under Development
MCAC12N5Y	DFN5060-8	N	5	150	±25	12	0.065	-	-	2	4	-	No	Under Development

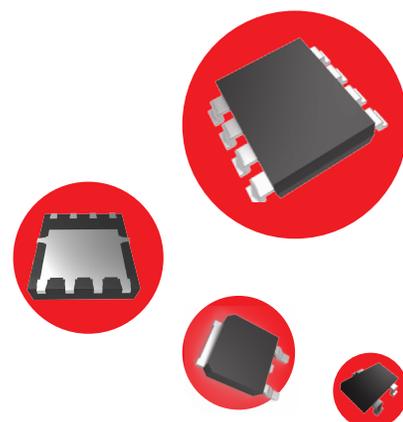
LV Trench MOSFET 12~30V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (V/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
MCMN2014	DFN2020-6J	N	0.7	12	±8.0	15	-	0.009	0.011	0.5	1.1	1300	No	Fig.17
SI134KL3	DFN1006-3	N	0.1	20	±12	0.75	-	0.5	0.7	0.35	1.1	120	Yes	Fig.3
SI134KL	SOT-883	N	0.1	20	±12	0.75	-	0.38	0.45	0.35	1.1	79	Yes	Fig.3
SI134KDW	SOT-363	N+N	0.15	20	±12	0.75	-	0.38	0.45	0.35	1.1	120	Yes	Fig.7
SI134KE	SOT-523	N	0.15	20	±12	0.75	-	0.38	0.45	0.35	1.1	120	Yes	Fig.3
SI4153	SOT-523	N	0.15	20	±6.0	0.915	-	0.57	0.62	0.45	1.1	110	Yes	Fig.3
SIX3134K	SOT-563	N+N	0.15	20	±12	0.75	-	0.38	0.45	0.35	1.1	120	Yes	Fig.7
SI134K	SOT-723	N	0.15	20	±12	0.75	-	0.38	0.45	0.35	1	79	Yes	Fig.3
SI2102	SOT-323	N	0.2	20	±8.0	2.1	-	0.06	0.11	0.6	1.2	300	No	Fig.1
SI134KW	SOT-323	N	0.2	20	±12	0.75	-	0.38	0.45	0.35	1.1	120	Yes	Fig.3
SI1012	SOT-523	N	0.275	20	±12	1	-	0.7	0.85	0.45	1.2	100	Yes	Fig.3
SI8810	SOT-23	N	0.3	20	±12	7	0.02	0.022	0.026	0.4	1	1150	Yes	Fig.3
SI2312	SOT-23	N	0.35	20	±8.0	5	-	0.0318	0.0356	0.45	1	865	No	Fig.1
SI2312A	SOT-23	N	0.35	20	±8.0	5	-	0.025	0.033	0.5	0.9	865	No	Fig.1
MCCD2007A	DFN2030-6L	N+N	0.5	20	±12	7	0.02	0.022	0.026	0.4	1	1150	Yes	Fig.14
MCMN2012	DFN2020-6J	N	0.75	20	±10	12	-	0.015	0.018	0.35	1	1800	No	Fig.11
MCMN2012A	DFN2020-6JA	N	0.75	20	±10	12	-	0.015	0.018	0.35	1	1800	No	Fig.11
SI2300	SOT-23	N	1	20	±10	4.5	-	0.025	0.038	0.5	0.9	482	No	Fig.1
MCS8810	TSSOP-8	N+N	1	20	±12	7	0.02	0.022	0.026	0.4	1	1150	Yes	Fig.22
SI2302	SOT-23	N	1.25	20	±8.0	3	-	0.072	0.11	0.65	1.2	237	No	Fig.1
SI2302A	SOT-23	N	1.25	20	±8.0	3	-	0.072	0.11	0.65	1.2	237	No	Fig.1
SI2312B	SOT-23	N	1.25	20	±10	6.8	-	0.021	0.03	0.5	0.9	500	No	Fig.1
SI3420A	SOT-23	N	1.25	20	±10	6	-	0.028	0.035	0.5	1	515	No	Fig.1
SIL2300	SOT23-6L	N+N	1.25	20	±10	4	-	0.025	0.032	0.45	1	620	No	Fig.28
SIL2322A	SOT23-6L	N+N	1.25	20	±8.0	3	-	0.03	0.04	0.55	1.25	500	No	Fig.16
MCU30N02	DPAK	N	30	20	±10	30	-	0.007	0.009	0.45	1	1700	No	Fig.1
MCU90N02	DPAK	N	45	20	±10	90	-	0.0045	0.005	0.4	1	3250	No	Fig.1
UM6K1N	SOT-363	N+N	0.15	30	±20	0.1	-	-	13	0.8	1.5	13	Yes	Fig.7
2SK3019	SOT-523	N	0.15	30	±20	0.1	-	-	13	0.8	1.5	13	Yes	Fig.3
2SK3019A	SOT-523	N	0.15	30	±20	0.1	-	8	-	0.8	1.5	13	Yes	Fig.3
MC3541	SOT-723	N	0.15	30	±20	0.1	-	-	13	0.5	1.5	13	Yes	Fig.3
2SK3018	SOT-323	N	0.2	30	±20	0.1	-	-	13	0.8	1.5	13	Yes	Fig.3
SI3400	SOT-23	N	0.35	30	±12	5.8	0.035	0.04	0.052	0.7	1.4	1050	No	Fig.1
SI3404	SOT-23	N	0.35	30	±20	5.8	0.028	0.042	-	1	3	820	No	Fig.1
SI2306	SOT-23	N	0.75	30	±20	3.16	0.047	0.065	-	1	3	305	No	Fig.1
SI2304	SOT-23	N	1	30	±20	2.5	0.065	0.09	-	1	2	240	No	Fig.1
SI3400A	SOT-23	N	1.3	30	±12	5.8	0.032	0.038	0.045	0.7	1.4	1155	No	Fig.1
SI3402	SOT-23	N	1.3	30	±12	4	0.055	0.07	0.11	0.6	1.4	390	No	Fig.1
MCM3400A	DFN2020-6L	N+N	1.4	30	±12	5	0.032	0.038	0.045	0.7	1.5	1155	No	Fig.5
MCQ4406	SOP-8	N	1.4	30	±20	10	0.012	0.016	-	1	3	1550	No	Fig.23
MCQ4410	SOP-8	N	1.4	30	±12	7.5	0.0135	0.02	-	1	3	9130	No	Fig.23
SIL08N03	SOT23-6L	N	1.6	30	±20	8	0.014	0.016	-	1	3	900	No	Fig.11
MCAC10H03	DFN5060	N	2	30	±20	100	0.0025	0.0035	-	1.2	2.5	5000	No	Fig.23
SIL3400A	SOT23-6L	N	2	30	±12	5.8	0.032	0.038	0.045	0.7	1.4	1155	No	Fig.11

MOSFETS

LV Trench MOSFET 12~30V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Internal Structure
			P_D (W)	V_{DS} (V)	V_{GS} (V)	I_D (A)	$R_{DS(ON)}$ (Ω) @10V	$R_{DS(ON)}$ (Ω) @4.5V	$R_{DS(ON)}$ (Ω) @2.5V	$V_{GS(th)}$ (V)	$V_{GS(th)}$ (V)	C_{iss} (pF)		
MCQ16N03	SOP-8	N	2.5	30	± 20	16	0.012	0.016	-	1	3	1550	No	Fig.23
MCQ18N03	SOP-8	N	2.5	30	± 20	18	0.005	0.0075	-	1	2.5	1950	No	Fig.23
MCQ4406A	SOP-8	N	2.5	30	± 20	12	0.012	0.015	-	1	2.5	950	No	Fig.23
MCG30N03A	DFN3333	N	20	30	± 20	30	0.01	0.013	-	1	2.5	1020	No	Fig.23
MCG30N03	DFN3030	N	25	30	± 20	30	0.009	0.013	-	1	2.3	1490	No	Fig.23
MCG50N03	DFN3333	N	30	30	± 20	50	0.006	0.008	-	1	2.5	2150	No	Fig.23
MCAC16N03	DFN5060-8L	N	30	30	± 20	16	0.009	0.014	-	1	3	1530	No	Fig.23
MCAC50N03	DFN5060-8L	N	38	30	± 20	50	0.009	0.013	-	1	2.3	1490	No	Fig.23
MCU80N03A	DPAK	N	45	30	± 20	80	0.0055	0.008	-	1	2.5	2150	No	Fig.1
MCU50N03	DPAK	N	60	30	± 20	50	0.0065	-	-	1	3	2000	No	Fig.1



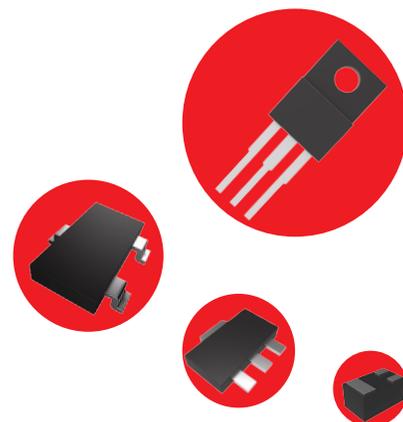
MV Trench MOSFET 40~200V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
SI2318A	SOT-23	N	1.2	40	±20	5	0.045	0.06	-	0.8	1.8	330	No	Fig.1
MCU60N04	DPAK	N	1.25	40	±20	60	0.013	0.02	-	1.2	2.5	1800	No	Fig.1
MCG20N04	DFN3333	N	21	40	±20	20	0.014	0.0185	-	1	2.5	750	No	Fig.23
MCU60N04A	DPAK	N	70	40	±20	60	0.007	0.0096	-	0.9	2	1650	No	Fig.1
BSS138W	SOT-323	N	0.3	50	±20	0.22	3.5	6	-	0.8	1.5	27	No	Fig.1
BSS138	SOT-23	N	0.35	50	±20	0.22	3.5	6	-	0.8	1.5	27	No	Fig.1
BSS138A	SOT-23	N	0.35	50	±20	0.22	1.6	2.5	-	0.8	1.45	22.8	Yes	Fig.3
BSS138AKDW	SOT-363	N+N	0.35	50	±20	0.22	3	4	-	0.8	1.45	22.8	Yes	Fig.7
2N7002KL3	DFN1006-3	N	0.1	60	±20	0.41	1.5	1.8	-	1.3	2.3	80	Yes	Fig.3
2N7002DW	SOT-363	N+N	0.15	60	±20	0.115	7	-	-	1	2.5	50	No	Fig.5
2N7002KDW	SOT-363	N+N	0.15	60	±20	0.34	5	5.3	-	1	2.5	40	Yes	Fig.7
2N7002KDWA	SOT-363	N+N	0.15	60	±20	0.34	5	5.3	-	1	2.5	40	Yes	Fig.7
2N7002T	SOT-523	N	0.15	60	±20	0.115	13.5	-	-	1	2	50	No	Fig.1
2N7002KV	SOT-563	N+N	0.15	60	±20	0.34	5	5.3	-	1	2.5	40	Yes	Fig.7
2N7002V	SOT-563	N+N	0.15	60	±20	0.115	5	-	-	1	2.5	50	No	Fig.5
2N7002KM	SOT-723	N	0.15	60	±20	0.34	4	4.5	-	1	2.5	40	Yes	Fig.3
2N7002KT	SOT-523	N	0.15	60	±20	0.12	13.50	-	-	1.00	2.00	50.00	Yes	Fig.3
2N7002	SOT-23	N	0.2	60	±20	0.115	7.5	-	-	1	2.5	50	No	Fig.1
2N7002KW	SOT-323	N	0.2	60	±20	0.34	5	5.3	-	1	2.5	40	Yes	Fig.3
2N7002KWA	SOT-323	N	0.2	60	±20	0.34	5	5.3	-	1	2	40	Yes	Fig.3
2N7002W	SOT-323	N	0.2	60	±20	0.115	13.5	-	-	1	2	50	No	Fig.1
2N7002DWL	SOT23-6L	N+N	0.225	60	±20	0.115	4.5	-	-	1	2.5	50	No	Fig.16
2N7002A	SOT-23	N	0.3	60	±30	0.115	3	4	-	1	2.5	50	No	Fig.1
2N7002K	SOT-23	N	0.35	60	±20	0.34	5	5.3	-	1	2.5	40	Yes	Fig.3
2N7002KA	SOT-23	N	0.35	60	±20	0.34	5	5.3	-	1	2.5	35	Yes	Fig.3
MCT03N06	SOT-223	N	1.2	60	±20	3	0.105	0.125	-	0.5	2	247	No	Fig.1
SI2310	SOT-23	N	1.2	60	±20	3	0.105	0.125	-	0.5	2	247	No	Fig.1
SI2310A	SOT-23	N	1.2	60	±20	3	0.105	0.125	-	0.5	1.5	247	No	Fig.1
SI2310B	SOT-23	N	1.2	60	±20	3	0.105	0.125	-	0.5	1.3	247	No	Fig.1
MCU20N06	DPAK	N	1.25	60	±20	20	0.045	-	-	1	3	500	No	Fig.1
MCU20N06A	DPAK	N	1.25	60	±20	20	0.045	-	-	1	3	500	No	Fig.1
MCU50N06	DPAK	N	1.25	60	±20	50	0.02	-	-	1.5	2.5	900	No	Fig.1
MCQ4828A	SOP-8	N+N	1.25	60	±20	4.5	0.056	0.077	-	1	3	540	No	Fig.19
MCQ03N06	SOP-8	N+N	1.7	60	±20	3	0.105	0.125	-	0.8	1.4	247	No	Fig.19
MCQ05N06	SOP-8	N+N	1.7	60	±20	5	0.045	-	-	1	3	500	No	Fig.19
SIL05N06	SOT23-6L	N	1.7	60	±20	5	0.045	-	-	1	3	500	No	Fig.11
MCQ6005	SOP-8	N+N	2	60	±20	5	0.035	0.045	-	1.2	2.5	979	No	Fig.19
MCU80N06A	DPAK	N	68	60	±20	80	0.008	0.011	-	1.2	2.2	1990	No	Fig.1
MCU80N06	DPAK	N	85	60	±20	80	0.013	-	-	1	2.4	2498	No	Fig.1
MCU20N06B	DPAK	N	1.25	60	±20	20	0.045	-	-	1	3	500	No	Fig.1
BSS123W	SOT-323	N	0.2	100	±20	0.17	6	10	-	1	2.8	60	No	Fig.1
BSS123	SOT-23	N	0.35	100	±20	0.17	6	10	-	1	2.8	60	No	Fig.1
BSS123K	SOT-23	N	0.35	100	±20	0.17	6	9	-	1.5	2.5	60	Yes	Fig.3
SI2324	SOT-23	N	0.35	100	±20	2	0.234	0.278	-	1.2	2.8	190	No	Fig.1

MOSFETS

MV Trench MOSFET 40~200V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
MCA03N10	SOT-89	N	0.5	100	±20	3	0.14	-	-	1	2	690	No	Fig.1
SI2324A	SOT-23	N	1.2	100	±20	2	0.28	0.3	-	1	2	520	No	Fig.1
MCU10N10	DPAK	N	1.25	100	±20	9.6	0.14	-	-	1.2	2.5	690	No	Fig.1
MCU40N10	DPAK	N	1.25	100	±20	40	0.017	-	-	1	2.5	3400	No	Fig.1
SIL03N10	SOT23-6L	N	1.5	100	±20	3	0.12	0.14	-	1	2.5	810	No	Fig.11
SIL2324A	SOT23-6L	N+N	1.5	100	±20	2	0.28	0.3	-	1	2	520	No	Fig.16
MCQ15N10B	SOP-8	N	4	100	±20	15	0.0095	0.0125	-	1	2.5	3530	No	Fig.23
MCG04N10A	DFN3030-8	N	25	100	±20	4	0.105	-	-	1.5	2.6	612	No	Fig.23
MCU15N10	DPAK	N	28	100	±20	15	0.1	-	-	1.2	2.9	612	No	Fig.1
MCU15N10A	DPAK	N	34	100	±20	15	0.11	0.12	-	1.1	3	800	No	Fig.1
MCU18N10	DPAK	N	47	100	±20	18	0.046	-	-	1	3	1380	No	Fig.1
MCT04N10	SOT-223	N	1.25	100	±20	3.7	0.14	-	-	1.2	2.5	690	No	Fig.1
MCT04N15	SOT-223	N	1.25	150	±20	4	0.16	-	-	1.5	2.5	900	No	Fig.1
MCU20N15	DPAK	N	68	150	±20	20	0.065	-	-	2.5	4.5	600	No	Fig.1
MCPF18N20	TO-220F	N	35	200	±30	18	0.16	-	-	1	3	836	No	Fig.1
MCU18N20	DPAK	N	65.8	200	±30	18	0.16	-	-	1	3	836	No	Fig.1
MCU05N20	DPAK	N	78	200	±30	5	0.58	-	-	1	3	255	No	Fig.1
MCU09N20	DPAK	N	83	200	±30	9	0.25	-	-	1	3	509	No	Fig.1



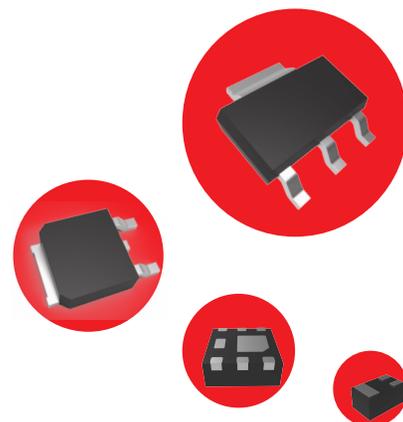
P Channel Trench MOSFET 8~100V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (V/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
SI2305	SOT-23	P	1.4	-8	±8.0	-4.1	-	0.045	0.06	-0.55	-0.9	740	No	Fig.2
MCM1206	DFN2020-6J	P	0.35	-12	±8.0	-6	-	0.045	0.06	-0.5	-0.9	740	No	Fig.10
MCM1208	DFN2020-6J	P	0.35	-12	±8.0	-8	-	0.028	0.04	-0.4	-1	1275	No	Fig.10
SI2333	SOT-23	P	1.1	-12	±8.0	-6	-	0.028	0.04	-0.4	-1	1275	No	Fig.2
MCM1216	DFN2020-6J	P	2.5	-12	±8.0	-16	-	0.021	0.027	-0.4	-1	2700	No	Fig.10
MCMG69	DFN2020-6G	P	18	-12	±8.0	-16	-	0.021	0.027	-0.4	-1	2700	No	Fig.2
SI2333A	SOT-23	P	1.1	-15	±8.0	-5.6	-	0.04	0.053	-0.4	-1	740	No	Fig.2
MCMG66	DFN2020-6G	P	1.7	-16	±8.0	-5.8	-	0.045	0.06	-0.45	-1	740	No	Fig.2
SI3139KL3	DFN1006-3	P	0.1	-20	±12	-0.66	-	0.52	0.78	-0.35	-1.1	113	Yes	Fig.4
SI3139KL	SOT-883	P	0.1	-20	±12	-0.68	-	0.52	0.7	-0.35	-1.1	170	Yes	Fig.4
SI3139KDW	SOT-363	P+P	0.15	-20	±12	-0.66	-	0.52	0.78	-0.35	-1.1	175	Yes	Fig.9
SI3139KE	SOT-523	P	0.15	-20	±12	-0.66	-	0.52	0.7	-0.35	-1.1	170	Yes	Fig.4
SIX3139K	SOT-563	P+P	0.15	-20	±6.0	-0.66	-	0.8	1.1	-0.35	-0.8	170	Yes	Fig.9
SI3139K	SOT-723	P	0.15	-20	±12	-0.66	-	0.52	0.7	-0.35	-0.8	113	Yes	Fig.4
SI3139KW	SOT-323	P	0.2	-20	±12	-0.66	-	0.52	0.78	-0.35	-1.1	175	Yes	Fig.4
SI2101	SOT-323	P	0.29	-20	±8.0	-1.4	-	0.1	0.14	-0.45	-1.2	640	No	Fig.2
SI2321	SOT-23	P	0.35	-20	±12	-2.9	-	0.057	0.076	-0.4	-0.9	715	No	Fig.2
SI3415	SOT-23	P	0.35	-20	±8.0	-4	-	0.05	0.06	-0.3	-1	1450	Yes	Fig.4
SIL3415	SOT23-6L	P	0.35	-20	±8.0	-4	-	0.05	0.06	-0.3	-1	1450	Yes	Fig.12
SI2301A	SOT-23	P	1	-20	±8.0	-2.8	-	0.12	0.15	-0.5	-0.9	880	No	Fig.2
MCS2305B	TSSOP-8	P	1.05	-20	±8.0	-8.2	-	0.0085	0.011	-0.55	-0.9	1255	No	Fig.25
SI2301	SOT-23	P	1.25	-20	±8.0	-2.8	-	0.12	0.15	-0.45	-1	880	No	Fig.2
SIL2301	SOT23-6L	P+P	1.25	-20	±8.0	-2.3	-	0.09	0.125	-0.4	-1	405	No	Fig.15
SI3415B	SOT-23	P	1.3	-20	±12	-5.6	-	0.036	0.049	-0.35	-0.9	698	Yes	Fig.4
MCM2301	DFN2020-6L	P+P	1.4	-20	±10	-3.8	-	0.07	0.09	-0.5	-0.9	880	No	Fig.17
SI2305B	SOT-23	P	1.4	-20	±10	-4.2	-	0.06	0.08	-0.5	-0.9	740	No	Fig.2
SI3415A	SOT-23	P	1.4	-20	±10	-4	-	0.045	0.06	-0.35	-0.9	950	Yes	Fig.4
MCM1567	DFN2020-6J	P	2	-20	±12	-9	-	0.018	0.024	-0.4	-1	2760	No	Fig.10
SIL2305B	SOT23-6L	P	2	-20	±10	-5.4	-	0.06	0.08	-0.5	-0.9	740	No	Fig.10
MCT06P02	SOT-223	P	3	-20	±12	-6	-	0.06	0.08	-0.5	-0.9	740	No	Fig.2
MCG18P02A	DFN3030-8	P	52	-20	±8.0	-18	-	0.0085	0.011	-0.55	-0.9	1255	No	Fig.21
SIL2623	SOT23-6L	P+P	0.35	-30	±20	-3	0.13	0.18	-	-1	-3	240	No	Fig.15
SI2307	SOT-23	P	1.1	-30	±20	-2.7	0.088	0.138	-	-1	-3	340	No	Fig.2
SI2303	SOT-23	P	1.3	-30	±20	-3	0.13	0.18	-	-1	-3	226	No	Fig.2
SI3401	SOT-23	P	1.3	-30	±12	-4.2	0.065	0.075	0.09	-0.7	-1.3	954	No	Fig.2
SI3401A	SOT-23	P	1.3	-30	±12	-4.2	0.06	0.07	0.085	-0.7	-1.3	1050	No	Fig.2
SI3407	SOT-23	P	1.3	-30	±20	-4.1	0.06	0.087	-	-1	-3	700	No	Fig.2
MCQ4435	SOP-8	P	1.4	-30	±20	-9.1	0.024	0.035	-	-1	-3	1350	No	Fig.21
MCQ4435A	SOP-8	P	1.4	-30	±20	-10	0.024	0.035	-	-1	-3	1350	No	Fig.21
MCQ4459	SOP-8	P	1.4	-30	±20	-6.5	0.046	0.072	-	-1.4	-2.4	625	No	Fig.21
MCQ7328	SOP-8	P+P	1.4	-30	±20	-8	0.021	0.032	-	-1	-2.5	2675	No	Fig.18
MCQ9435	SOP-8	P	1.4	-30	±20	-5.1	0.06	0.105	-	-1	-2	-	No	Fig.21
SL3401A	SOT-23-3L	P	1.5	-30	±12	-4.4	0.06	0.07	0.085	-0.7	-1.3	1050	No	Fig.2
SL3407	SOT-23-3L	P	1.5	-30	±20	-4.3	0.06	-	0.087	-1	-3	700	No	Fig.2

MOSFETS

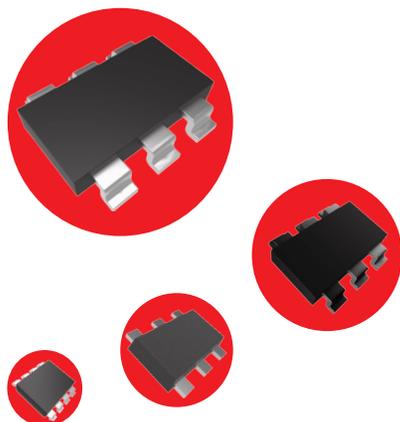
P Channel Trench MOSFET 8~100V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
SIL3407	SOT23-6L	P	1.6	-30	±20	-4.1	0.05	0.07	-	-1	-3	700	No	Fig.10
MCQ4953	SOP-8	P	2.5	-30	±20	-5	0.06	0.09	-	-1	-2.5	-	No	Fig.18
MCQ4407A	SOP-8	P	3	-30	±20	-12	0.015	0.025	-	-1	-3	1750	No	Fig.21
MCQ4407B	SOP-8	P	3.2	-30	±25	-12	0.0125	0.025	-	-1.2	-2.8	2050	No	Fig.21
MCG10P03	DFN3030	P	20	-30	±12	-10	-	0.026	0.038	-0.6	-1.5	1550	No	Fig.21
MCG16P03	DFN3030	P	35	-30	±20	-16	0.015	0.025	-	-1	-1.9	2130	No	Fig.21
MCU40P04	DPAK	P	1.25	-40	±20	-40	0.014	-	-	-1.5	-3	2960	No	Fig.2
MCU50P04	DPAK	P	65	-40	±20	-50	0.013	-	-	-1.2	-2.5	5020	No	Fig.2
BSS84	SOT-23	P	0.225	-50	±20	-0.13	8	-	-	-0.9	-2	30	No	Fig.2
BSS84KW	SOT-323	P	0.225	-50	±20	-0.13	8	-	-	-0.9	-2	22	Yes	Fig.4
BSS84DW	SOT-363	P+P	0.45	-50	±20	-0.16	8	-	-	-0.9	-2	30	NO	Fig.17
BSS84A	SOT-23	P	0.225	-60	±30	-0.17	8	-	-	-0.9	-2	30	No	Fig.2
BSS84K	SOT-23	P	0.225	-60	±20	-0.13	6	7	-	-0.8	-2.5	30	Yes	Fig.4
SI5618	SOT-23	P	0.83	-60	±20	-1.9	0.15	0.2	-	-1	-3	580	No	Fig.2
MCT04P06	SOT-223	P	2	-60	±20	-3.5	0.08	0.1	-	-1	-3	650	No	Fig.2
SIL04P06	SOT23-6L	P	2	-60	±20	-3.5	0.08	0.1	-	-1	-3	650	No	Fig.10
MCU12P06	DPAK	P	40	-60	±20	-12	0.08	0.1	-	-1	-3	650	No	Fig.2
MCU25P06	DPAK	P	90	-60	±20	-25	0.045	-	-	-2	-3.5	3430	No	Fig.2
MCAC60P06	DFN5060	P	130	-60	±20	-60	0.018	-	-	-2	-3.5	5814	No	Fig.21
MCU60P06	DPAK	P	130	-60	±20	-60	0.018	-	-	-2	-3.5	5814	No	Fig.2
MCP60P06	TO-220AB(H)	P	130	-60	±20	-60	0.018	-	-	-2	-3.5	5814	No	Fig.2
MCU18P10	DPAK	P	1.25	-100	±20	-18	0.1	-	-	-1	-3	2100	Yes	Fig.4
MCT06P10	SOT-223	P	1.25	-100	±20	-6	0.205	0.25	-	-1.2	-2.8	760	Yes	Fig.4
MCU12P10	DPAK	P	40	-100	±20	-12	0.2	-	-	-1	-3	1055	Yes	Fig.4
MCU20P10	DPAK	P	70	-100	±20	-20	0.116	-	-	-1	-3	2100	Yes	Fig.4



N+P MOSFET 20~60V Series

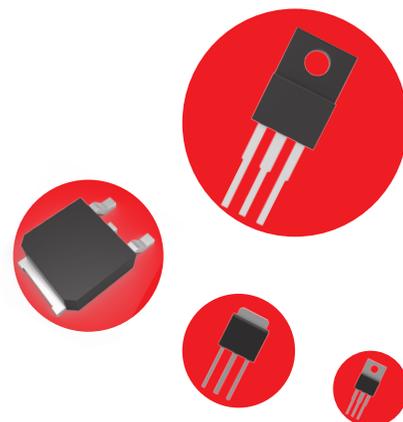
Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
SIX3439K	SOT-563	N+P	0.15	20, -20	±12	0.75, -0.66	-	0.38, 0.52	0.45, 0.7	0.35, -0.35	1, -1.1	120	Yes	Fig.8
SI3439KDW	SOT-363	N+P	0.15	20, -20	±12	0.75, -0.66	-	0.38, 0.52	0.45, 0.78	0.35, -0.35	1.1, -1.1	120	Yes	Fig.8
SIL3439K	SOT23-6L	N+P	1.25	20, -20	±12	1.3, -1.1	-	0.38, 0.52	0.45, 0.78	0.35, -0.35	1.1, -1.1	120, 113	Yes	Fig.27
SIL2308	SOT23-6L	N+P	0.45	20, -20	±8, ±12	5, 4	-	0.038, 0.09	0.045, 0.11	0.5, -0.5	1, -1	800	No	Fig.24
SIL2546	SOT23-6L	N+P	0.9	25, -20	±10	0.7, -0.66	-	0.5, 0.75	0.75, 1	0.6, -0.6	1.5, -1.5	30.3, 113	Yes	Fig.26
SIL6321	SOT23-6L	N+P	1	30, -30	±8.0	1, 1	0.32	0.45	0.55	0.7, -0.7	1.4, -1.3	1155, 1050	No	Fig.24
SIL3724	SOT23-6L	N+P	2	30, -30	±20	5.8, -4.1	0.03, 0.06	0.042, 0.08	-	1, 1	2.5, -2.2	820, 700	No	Fig.24
MCQ4503A	SOP-8	N+P	2	30, -30	±20	6.5, -5	0.03, 0.06	0.04, 0.09	-	1.2, -1	2.4, -2.5	255	No	Fig.20
BSS8402DW	SOT-363	N+P	0.2	60, -50	±20	0.115, -0.13	2, 8	-	-	1, -0.9	2.5, -2	50, 30	No	Fig.6
MC7252KDW	SOT-363	N+P	0.15	60, -50	±20	0.34, -0.18	5, 8	5.3	-	1, -0.9	2.5, -2	40	Yes	Fig.8
MCQ4559	SOP-8	N+P	2	60, -60	±20	4.5, -3.5	0.058, 0.08	0.072, 0.1	-	1, -1	3, -3	66	No	Fig.20



MOSFETS

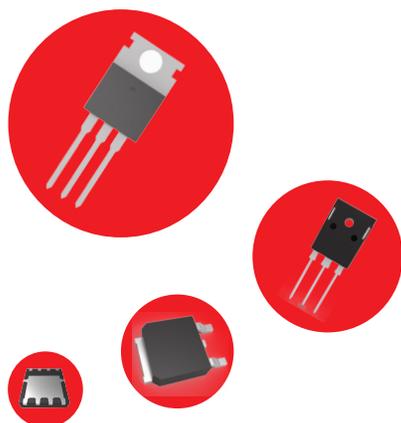
HV Planar MOSFET 600~800V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
MCU04N60	DPAK	N	1.25	600	±30	4	3	-	-	2	4	540	No	Fig.1
MCU05N60	DPAK	N	1.25	600	±30	4.5	2.5	-	-	2	4	670	No	Fig.1
MCU05N60A	DPAK	N	1.25	600	±30	4.5	2.5	-	-	2	4	670	No	Fig.1
MCP04N60	TO-220	N	2	600	±30	4	3	-	-	2	4	540	No	Fig.1
MCPF04N60	TO-220F	N	2	600	±30	4	3	-	-	2	4	540	No	Fig.1
MCPF05N60B	TO-220F	N	2	600	±30	5	2.5	-	-	2	4	670	No	Fig.1
MCPF08N60	TO-220F	N	2	600	±30	8	1.3	-	-	2	4	1280	No	Fig.1
MCU01N60	DPAK	N	17	600	±30	1	10	-	-	3	4.2	135	No	Fig.1
MCU04N60A	DPAK	N	44.6	600	±30	4	2.6	-	-	2.5	4.5	760	No	Fig.1
MCU04N65	DPAK	N	1.25	650	±30	4	3	-	-	2	4	760	No	Fig.1
MCU07N65	DPAK	N	2	650	±30	7	1.4	-	-	2.5	4.5	1600	No	Fig.1
MCP04N65	TO-220	N	2	650	±30	4	3	-	-	2	4	760	No	Fig.1
MCPF04N65	TO-220F	N	2	650	±30	4	3	-	-	2	4	760	No	Fig.1
MCPF12N65	TO-220F	N	2	650	±30	12	0.85	-	-	2	4	1800	No	Fig.1
MCPF07N65	TO-220F	N	50	650	±30	7	1.4	-	-	2.5	4.5	1600	No	Fig.1
MCP07N65	TO-220AB(H)	N	73	650	±30	7	1.4	-	-	2.5	4.5	1600	No	Fig.1
MCP20N70	TO-220AB(H)	N	151	700	±30	20	0.21	-	-	2.5	4	2328	No	Fig.1
MCU02N80	DPAK	N	1.25	800	±30	2.4	6.3	-	-	3	5	550	No	Fig.1
MCPF05N80	TO-220F	N	25	800	±30	5	2.8	-	-	3	4	667	No	Fig.1
MCP04N80	TO-220	N	63	800	±30	4	1.2	-	-	2.5	4.5	598	No	Fig.1
MCD04N80	TO-251	N	63	800	±30	4	1.2	-	-	2.5	4.5	598	No	Fig.1



Super Junction MOSFET 650V

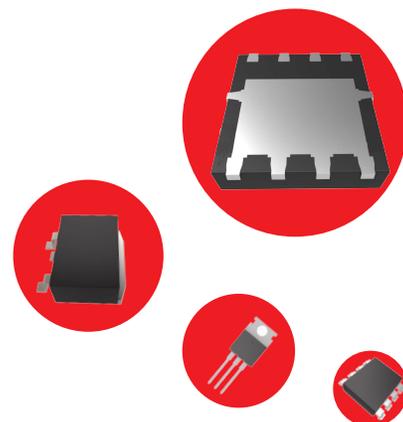
Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (V/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)		R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
MSJPF11N65	TO-220F	N	31.3	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.1
MSJPF11N65	TO-220F	N	31.3	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.1
MSJPF20N65	TO-220F	N	34	650	±30	20	0.17	-	-	2.5	4.5	1724	No	Fig.1
MSJPF20N65	TO-220F	N	34	650	±30	20	0.17	-	-	2.5	4.5	1724	No	Fig.1
MSJU07N65	DPAK	N	63	650	±30	7	0.6	-	-	2.5	4	509	No	Fig.1
MSJU07N65	DPAK	N	63	650	±30	7	0.6	-	-	2.5	4	509	No	Fig.1
MSJAC11N65Y	DFN5060	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.23
MSJU11N65	DPAK	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.1
MSJP11N65	TO-220AB(H)	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.1
MSJAC11N65Y	DFN5060	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.23
MSJU11N65	DPAK	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.1
MSJP11N65	TO-220AB(H)	N	78	650	±30	11	0.38	-	-	2.5	4	901	No	Fig.1
MSJP20N65	TO-220AB(H)	N	151	650	±30	20	0.17	-	-	2.5	4.5	1724	No	Fig.1
MSJW20N65	TO-247	N	151	650	±30	20	0.17	-	-	2.5	4.5	1724	No	Fig.1
MSJP20N65	TO-220AB(H)	N	151	650	±30	20	0.17	-	-	2.5	4.5	1724	No	Fig.1



MOSFETS

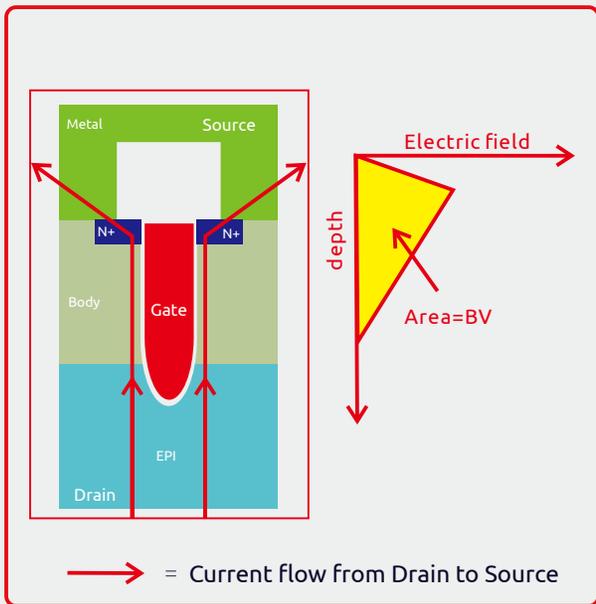
SGT MOSFET 40~150V

Part Number	Package	Channel	Power Rating	Drain-Source Voltage	Gate Source Voltage	Drain Current	Static Drain-Source On-Resistance			Gate Threshold Voltage (Min)	Gate Threshold Voltage (Max)	Input Capacitance	ESD Diodes (Y/N)	Internal Structure
			P _D (W)	V _{DS} (V)	V _{GS} (V)	I _D (A)	R _{DS(ON)} (Ω) @10V	R _{DS(ON)} (Ω) @4.5V	R _{DS(ON)} (Ω) @2.5V	V _{GS(th)} (V)	V _{GS(th)} (V)	C _{iss} (pF)		
MCAC10H04Y	DFN5060	N	80	40	±20	100	0.0018	0.0023	-	1	2	5059	No	Fig.23
MCAC130N04Y	DFN5060	N	140	40	±20	130	0.0018	0.003	-	1	2.5	6587.4	No	Fig.23
MCAC80N045Y	DFN5060	N	70	45	±20	80	0.0039	0.005	-	1	2	2554	No	Fig.23
MCAC10H045Y	DFN5060	N	80	45	±20	100	0.0018	0.0023	-	1	2	5106	No	Fig.23
MCQ12N06	SOP-8	N	3.1	60	±20	12	0.009	0.013	-	1.1	2.5	1988	No	Fig.17
MCAC30N06Y	DFN5060	N	30	60	±20	30	0.02	0.022	-	1	2.5	1552	No	Fig.23
MCAC53N06Y	DFN5060	N	70	60	±20	53	0.0082	0.012	-	1.1	2.5	1988	No	Fig.23
MCAC50N06Y	DFN5060	N	78	60	±20	50	0.0082	0.014	-	1	3	1409	No	Fig.23
MCB85N06Y	D2-PAK	N	85	60	±20	85	0.013	-	-	1	2.4	2498	No	Fig.1
MCAC70N06Y	DFN5060	N	85	60	±20	70	0.007	-	-	2	4	2122	No	Fig.23
MCAC80N06Y	DFN5060	N	85	60	±20	80	0.0042	0.0052	-	1.1	2.5	3980	No	Fig.23
MCAC85N06Y	DFN5060	N	105	60	±20	85	0.003	0.0045	-	1	2.5	3350	No	Fig.23
MCB150N06YB	D2-PAK	N	187	60	±20	150	0.0055	-	-	2	4	3800	No	Fig.1
MCAC40N10YA	DFN5060	N	70	100	±20	40	0.012	-	-	2	4	1684	No	Fig.23
MCAC45N10Y	DFN5060	N	75	100	±20	45	0.0085	0.013	-	1	3	2240	No	Fig.23
MCAC50N10Y	DFN5060	N	75	100	±20	50	0.006	0.01	-	1	3	2808	No	Fig.23
MCAC80N10Y	DFN5060	N	85	100	±20	80	0.0043	0.0063	-	1	3	6124	No	Fig.23
MCB70N10Y	D2-PAK	N	115	100	±25	70	0.018	-	-	2	4	2960	No	Fig.1
MCB130N10Y	D2-PAK	N	192	100	±20	130	0.0046	-	-	1.2	4	6124.6	No	Fig.1
MCP130N10Y	TO-220AB(H)	N	192	100	±20	130	0.0046	-	-	1.2	4	6124.6	No	Fig.1
MCAC60N150Y	DFN5060	N	125	150	±20	60	0.019	-	-	2	4	2275	No	Fig.23

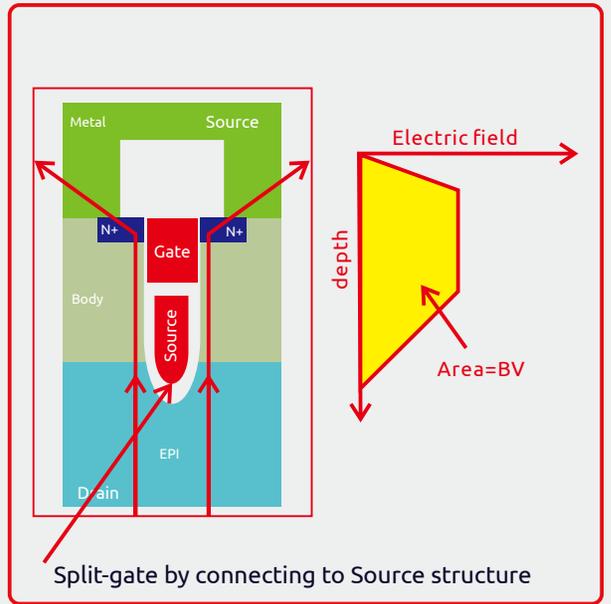


SGT – Split Gate Technology

Regular Trench MOSFET



Split-Gate Trench MOSFET

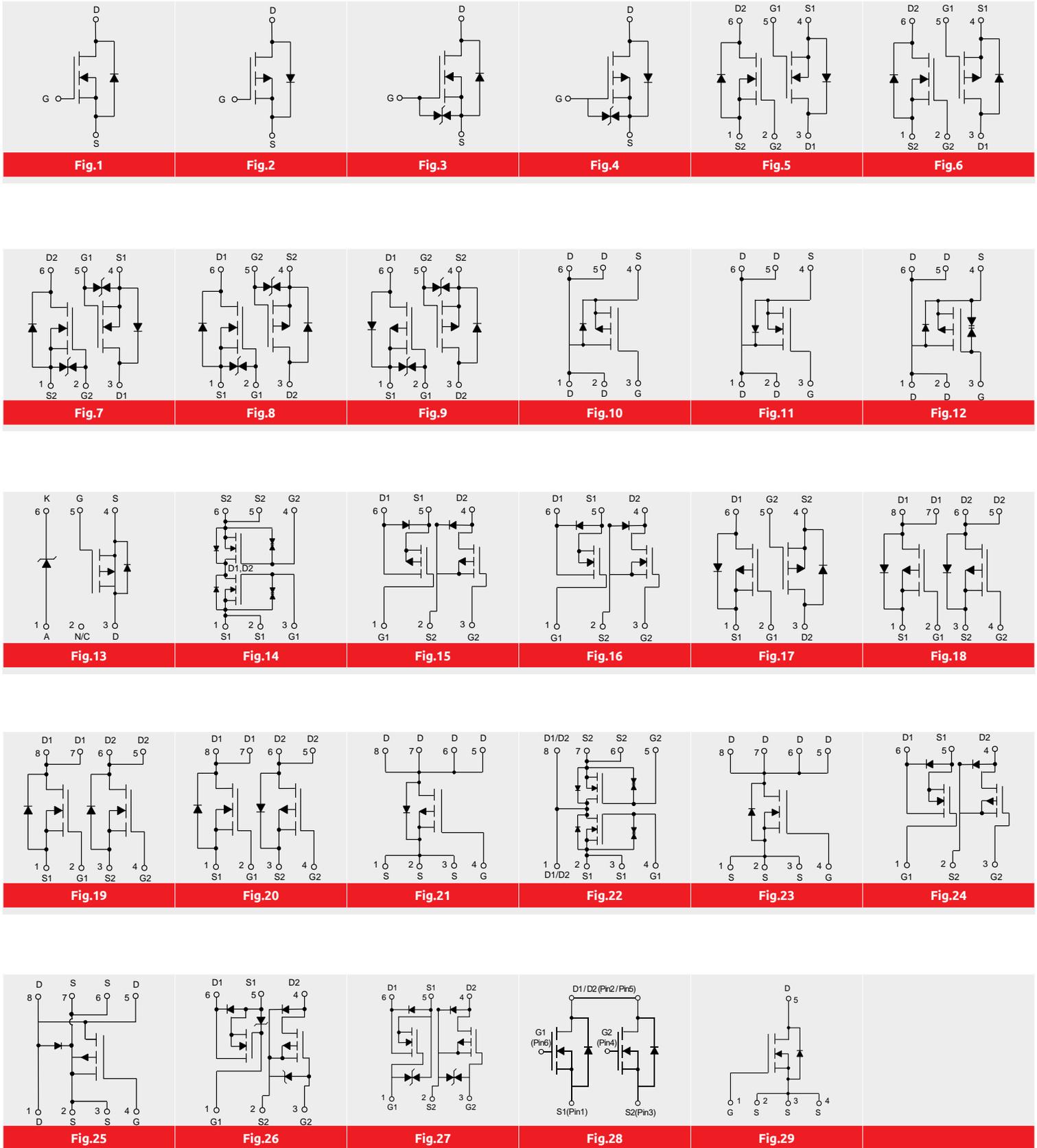


Split-Gate Advantages:

- Increases BV_{DSS} with the buried source depleting the drift region (field-plate effect)
- Higher N-doping in the drift region that minimizes R_{DS(on)}
- Decreases Q_{gd} that reduces the Miller charge coupling to minimize false turn-on
- Overall, improves FOM (Figure of Merit=R_{on}*Q_g) that reduces both the switching & conduction losses

MOSFETS

Internal Structure



ESD Protection & Power TVS

- * Comprehensive portfolio of ESD with ultra low capacitance
- * Power TVS from 3.3V~600V
- * Auto Grade power TVS

ESD Protection & Power TVS 16

<i>ESD Protection Devices</i>	17
<i>Transient Voltage Suppressor</i>	24



ESD and Power TVS

ESD Protection Devices

Part Number	Package	Channel	Peak Power Dissipation	Reverse Standoff Voltage	Maximum Reverse Leakage Current	Test Current	Breakdown Voltage		Maximum Clamping Voltage	Maximum Peak Pulse Current	Junction Capacitance	Internal Structure
			P _{PK} (W)	V _{RWM} (V)	I _R (μ A)	I _T (mA)	V _{BR} (V) Min	V _{BR} (V) Max	V _C (V)	I _{PP} (A)	C _J (pF)	
ESDLC2504P9	DFN3020-10	4	1000	2.50	0.5	0.002	2.7	-	25	40	2.5	Fig.14
ESD2V8P8U	SOP-8	4	400	2.80	1	1	3.0	-	8.5	5.0	3.0	Fig.19
ESDLC2V8P8U	SOP-8	4	400	2.80	1	1	3.0	-	8.0	5.0	0.7	Fig.19
SLVU2.8-4	SOP-8	4	600	2.80	1	1	3.0	3	21	30	1.0	Fig.19
SLVU2.8	SOT-23	2	500	2.80	1	1	3.0	4 TYP	8.0	5.0	13	Fig.27
ESDLC3V0L4	SOT-553	4	20	3.00	1	1	5	5.9	8.0	2.5	9	Fig.32
ESDL3V3LB	DFN1006-2	1	80	3.30	0.05	0.002	3.5	-	8.0	8.0	25	Fig.1
ESDSL3V3LB	DFN1006-2	1	100	3.30	0.05	1	5.0	-	20	5.0	0.3	Fig.1
ESD3V3D5	SOD-523	1	220	3.30	0.08	1	5.0	-	13	16	105	Fig.2
ESDLC3V3LB	DFN1006-2	1	11	3.30	0.1	1	4.3	6.8	11	1.0	3.1	Fig.1
ESDSL3V3D3B	SOD-323	1	350	3.30	0.1	1	4.0	-	8.0	20	1.5	Fig.18
ESDLC3V3D5	SOD-523	1	155	3.30	0.1	0.002	3.5	-	14.5	11	12	Fig.3
ESDLC3V3AE2	0201-A	1	30	3.30	0.2	1	4.3	-	10	3.0	3.0	Fig.1
ESD3V3D3B	SOD-323	1	500	3.30	0.5	0.002	4.2	6	17	30	200	Fig.1
ESD3V3D5B	SOD-523	1	96	3.30	0.5	1	4.2	6.5	12	8.0	16	Fig.1
ESDLC3304P5	DFN2510-10	4	50	3.30	0.5	0.002	3.5	-	10	5.0	0.8	Fig.11
ESDLC3304P8	DFN2626-10	4	450	3.30	0.5	0.005	3.5	-	18	25	2.0	Fig.13
ESDLC3374P9	DFN3020-10	4	1000	3.30	0.5	0.002	3.5	-	25	40	2.5	Fig.14
ESDLC3V3L	DFN1006-2	1	150	3.30	0.5	0.002	3.5	-	15	10	20	Fig.2
LC03-3.3	SOP-8	2	7200	3.30	0.5	0.002	3.5	-	48	150	16	Fig.20
SM3.3H	SOT-23	2	500	3.30	0.5	1	3.5	-	12.5	40	260	Fig.4
ESDLC3324P5	DFN2510-10	4	100	3.30	0.5	1	4	6	25	4.0	0.4	Fig.5
ESDH3V0D5B	SOD-523	1	325	3.30	1	1	3.8	6	13	25	36	Fig.1
ESD3V3D9B	SOD-923	1	80	3.30	1	1	4	-	8.0	1.0	8	Fig.1
ESDLC3V3D3B	SOD-323	1	350	3.30	1	1	4.0	-	36	28	4.5	Fig.18
ESD3V3L	DFN1006-2	1	300	3.30	1	1	4.2	6	15	20	250	Fig.2
ESD3V3D3	SOD-323	1	500	3.30	1	1	5.0	-	9.3	7.0	100	Fig.2
ESD3V3D9	SOD-923	1	100	3.30	1	1	5	-	8.8	5.0	50	Fig.2
SM3.3B	SOT-23	2	350	3.30	1.5	1	4	6.5	10	25	100	Fig.26
SM3.3	SOT-23	2	360	3.30	1.5	1	5.2	6	20	18	200	Fig.4
ESD3V3D7	SOD-723	1	113	3.30	2.5	1	5	-	11.9	10.4	80	Fig.2
ESD3V3AP	SOT-23	2	300	3.30	10	1	5	5.9	7.5	13.3	150	Fig.4
ESDLC3V3D3	SOD-323	1	350	3.30	20	1	4.0	-	36	28	4.5	Fig.3
ESD4571P6	DFN1610-2	1	2400	4.50	0.2	1	4.8	-	18	135	600	Fig.2
ESD4V5LB	DFN1006-2	1	540	4.50	0.5	1	4.8	6	12	45	100	Fig.1
ESDN4V5D3B	SOD-323	1	2000	4.50	1	1	4.7	-	15	135	300	Fig.1
ESD4V5P4B	DFN2020-3L	1	6000	4.50	1	1	4.8	-	20	300	350	Fig.36
ESD4V5P4	DFN2020-3L	1	5000	4.50	2	1	4.8	-	18	280	680	Fig.35
ESD0512LB	DFN1006-2	1	200	5.00	0.025	1	11	16	20	10	40	Fig.1
ESD5V0D5	SOD-523	1	174	5.00	0.08	1	6.2	-	18.6	9.4	80	Fig.2
ESDLC5V0AE2	0201-A	1	120	5.00	0.1	1	6.0	9	15	8.0	15	Fig.1
ESDSL5V0AE2	0201-A	1	125	5.00	0.1	1	6	-	25	5.0	0.32	Fig.1
ESDUL5V0AE2	0201-A	1	11	5.00	0.1	1	6.0	-	11	1.0	3.0	Fig.1
ESDLC5V0D5B	SOD-523	1	150	5.00	0.1	1	5.8	7.8	12	5.0	12	Fig.1

ESD Protection Devices

Part Number	Package	Channel	Peak Power Dissipation	Reverse Standoff Voltage	Maximum Reverse Leakage Current	Test Current	Breakdown Voltage		Maximum Clamping Voltage	Maximum Peak Pulse Current	Junction Capacitance	Internal Structure
			P _{PK} (W)	V _{RWM} (V)	I _R (μ A)	I _T (mA)	V _{BR} (V) Min	V _{BR} (V) Max	V _C (V)	I _{PP} (A)	C _J (pF)	
ESDLC5V0D7B	SOD-723	1	100	5.00	0.1	1	5.8	-	12.5	5.0	12	Fig.1
LSM05B	SOT-23	2	50	5.00	0.1	1	5.8	8	10	5.0	15	Fig.26
SM05BT	SOT-523	2	60	5.00	0.1	1	5	8.3	12	5.0	10.5	Fig.26
ESDSL5V0L	DFN1006-2	1	80	5.00	0.1	1	6.0	-	16	4.0	0.7	Fig.3
ESD5V0PW	DFN1308-5	4	65	5.00	0.1	1	6.5	9	13	5.0	0.7	Fig.39
ESDSL5V0LTB	DFN1006-3	2	75	5.00	0.1	1	6.4	-	15	5.0	0.8	Fig.4
ESDULC5V0LB	DFN1006-2	1	10	5.00	0.2	1	6.0	-	10	1.0	3.0	Fig.1
ESD0514PD	DFN0808-4	4	40	5.00	0.2	1	6.0	8	12	3.5	5.0	Fig.38
CSP5V0AE	CSP0201	1	140	5.00	0.5	1	6.0	-	9.5	18	30	Fig.1
ESD5V0LB	DFN1006-2	1	400	5.00	0.5	1	6	9	16	25	100	Fig.1
ESDSL5V0LB	DFN1006-2	1	100	5.00	0.5	1	6	9	20	4.0	0.35	Fig.1
ESDLC5V0L2B	DFN1006-2L	1	75	5.00	0.5	1	5.6	-	15	5.0	15	Fig.1
ESDN5V0D3B	SOD-323	1	1620	5.00	0.5	1	6	-	13.5	120	300	Fig.1
ESDLC5V0PB8	DFN3810-9	8	100	5.00	0.5	1	6.0	-	20	5.0	0.35	Fig.15
ESDLC5V0PA6	DFN4120-10	6	100	5.00	0.5	1	6.0	-	20	5.0	0.4	Fig.16
ESDLC0514MP	MSOP-10	4	100	5.00	0.5	1	6.0	-	20	5.0	0.5	Fig.17
ESDSL5V0D3B	SOD-323	1	350	5.00	0.5	1	6.0	7 TYP	28	18	2.0	Fig.18
ESD5V0L	DFN1006-2	1	300	5.00	0.5	1	6	-	15	20	160	Fig.2
ESDH5V0D5	SOD-523	1	300	5.00	0.5	1	6.0	-	14	22	160	Fig.2
LSR05	SOT-143	2	90	5.00	0.5	1	6.0	-	18	5.0	0.4	Fig.21
SR05	SOT-143	2	500	5.00	0.5	1	6.0	-	20	25	6	Fig.21
ESDLC0534P3	DFN1616-6L	4	75	5.00	0.5	1	6.0	-	15	5.0	0.4	Fig.23
ESDSL5V0D5	SOD-523	1	80	5.00	0.5	1	6.0	-	16	5.0	0.7	Fig.3
ESDLC5V0D9L	SOD-923	1	75	5.00	0.5	1	5.4	6.5	15	5.0	0.8	Fig.3
ESDLC5V0LTB	DFN1006-3	2	10	5.00	0.5	1	6	-	10	1.0	5.0	Fig.4
ESDSL5V0T2	SOT-23	2	100	5.00	0.5	1	6	-	20	5.0	0.4	Fig.4
HSM05	SOT-23	2	320	5.00	0.5	1	6	-	14	23	160	Fig.4
ESDLC0502P2	DFN1210-6	2	125	5.00	0.5	1	6.0	-	25	5.0	0.5	Fig.6
ESDLC0502P6	DFN1610-6	2	125	5.00	0.5	1	6.0	-	25	5.0	1.0	Fig.7
ESDLC0503P6	DFN1610-6	3	100	5.00	0.5	1	6.0	-	25	4.0	0.5	Fig.8
SRL05P7	DFN1510-6	4	90	5.00	0.9	1	6.1	9.6	17	5.0	0.8	Fig.34
SRL05	SOT23-6L	4	90	5.00	0.9	1	6.1	9.6	17	5.0	0.8	Fig.34
ESDLC0524DFN10	DFN-10	4	150	5.00	0.9	1	6.1	8.5	18	5.0	0.8	Fig.5
ESDSL5V0D5	DFN-10	4	75	5.00	0.9	1	6.0	-	15	5.0	0.8	Fig.5
ESDSL5V0D5	DFN-10	4	150	5.00	0.9	1	6.1	9.6	15	5.0	0.8	Fig.5
ESDU5V0T5	SOT-523	2	56	5.00	1	1	5.4	9.4	11	4.0	0.5	Fig.4
ESD5V0D3B	SOD-323	1	120	5.00	1	1	5.8	8.8	15	8.0	27	Fig.1
ESDH5V0D3B	SOD-323	1	476	5.00	1	1	5.5	7.5	17	28	60	Fig.1
SD05C	SOD-323	1	350	5.00	1	1	6	-	13.5	30	125	Fig.1
ESD5V0D5B	SOD-523	1	150	5.00	1	1	5.8	8.8	13	12	27	Fig.1
ESDBV5V0D5	SOD-523	1	52	5.00	1	1	5.6	8	13	4.0	3.0	Fig.1
ESD5V0D9B	SOD-923	1	80	5.00	1	1	5.6	7.8	11	5.0	15	Fig.1
ESDLC5V0D9B	SOD-923	1	80	5.00	1	1	5.6	7.8	12	3	2.1	Fig.1
ESDLC5V0D3B	SOD-323	1	350	5.00	1	1	6.0	-	32	21	5.0	Fig.18

ESD and Power TVS

ESD Protection Devices

Part Number	Package	Channel	Peak Power Dissipation	Reverse Standoff Voltage	Maximum Reverse Leakage Current	Test Current	Breakdown Voltage		Maximum Clamping Voltage	Maximum Peak Pulse Current	Junction Capacitance	Internal Structure
			P _{PK} (W)	V _{RWM} (V)	I _R (μ A)	I _T (mA)	V _{BR} (V) Min	V _{BR} (V) Max	V _C (V)	I _{PP} (A)	C _J (pF)	
ESD0561P1	DFN1608-2L	1	1400	5.00	1	1	6	9	17.5	80	800	Fig.2
ESD0571P6	DFN1610-2	1	1875	5.00	1	1	6.0	-	15	125	650	Fig.2
ESD5V0D3	SOD-323	1	350	5.00	1	1	6.2	7.3	15.5	15	350	Fig.2
SD05	SOD-323	1	500	5.00	1	1	6.0	-	12.5	40	350	Fig.2
ESD5V0D7	SOD-723	1	117	5.00	1	1	6.2	-	13.3	8.8	65	Fig.2
ESD5V0D9	SOD-923	1	100	5.00	1	1	6	7.2	11	5.0	40	Fig.2
ESDLC5V0D9	SOD-923	1	100	5.00	1	1	5.4	8.5	9.8	1.0	0.5	Fig.2
ESDLC5V0C2	SOT-23	1	650	5.00	1	1	6	8	26	25	2.0	Fig.24
ESDU5V0C2	SOT-23	2	87.5	5.00	1	1	6.0	-	25	3.5	0.8	Fig.25
SM05B	SOT-23	2	300	5.00	1	1	6.0	-	15	20	80	Fig.26
ESD5V0K4	SOT23-6L	4	300	5.00	1	1	6.0	-	15	20	140	Fig.29
ESDA6V1-4L	SOT23-6L	4	80	5.00	1	1	6.1	-	12	3.0	10	Fig.30
ESDU5V0H4	SOT23-6L	4	125	5.00	1	1	6.5	8.8	25	5.0	0.8	Fig.31
PSRV05-4	SOT23-6L	4	500	5.00	1	1	6.0	-	20	25	4.0	Fig.31
SRV05-4B	SOT23-6L	4	90	5.00	1	1	6.1	9.6	12.5	5.0	0.8	Fig.31
SRV05-4L	SOT23-6L	4	350	5.00	1	1	6.0	-	17.5	12	1.5	Fig.31
SRV05-4S	SOT-563	4	125	5.00	1	1	6	8.8	25	5.0	0.8	Fig.31
ESDLC5V0J4	SOT-353	4	20	5.00	1	1	6	7.2	9.8	1.6	14.5	Fig.32
ESDLC5V0L4	SOT-553	4	20	5.00	1	1	6	7.2	11	1.6	14	Fig.32
ESDLC5V0M5	SOT-563	5	20	5.00	1	1	6.2	7.2	12	1.6	11	Fig.33
ESDU5V0M5	SOT-563	4	90	5.00	1	1	6	10	25	3.5	0.8	Fig.34
ESDLC5V0T5	SOT-523	2	125	5.00	1	1	5.6	-	23	5.0	2.0	Fig.4
ESDLC5V0DFN10	DFN-10	4	150	5.00	1	1	6.0	-	28	5.0	0.5	Fig.5
SRV05-4	SOT-363	4	90	5.00	2	1	6.0	-	15	6.0	2.0	Fig.31
ESD5V0J4	SOT-353	4	200	5.00	2	1	6	7.2	12.5	5.0	90	Fig.32
ESD5V0T143-4U	SOT-143	2	500	5.00	5	1	6.0	-	20	28	3.0	Fig.21
ESDLC5V0D3	SOD-323	1	350	5.00	5	1	6.0	-	32	21	5.0	Fig.3
SRV05-4A	SOT23-6L	4	300	5.00	5	1	6.0	-	25	12	3.0	Fig.31
ESD5V0L4	SOT-553	4	200	5.00	5	1	6	7.2	13.5	5.0	80	Fig.32
ESD5V0K5	SOT-363	5	100	5.00	5	1	6	7.2	12.5	8.0	140	Fig.33
ESD5V0M5	SOT-563	5	100	5.00	5	1	6	7.2	13.5	5.0	32	Fig.33
SM05	SOT-23	2	300	5.00	10	1	6.2	7.3	9.8	12	110	Fig.4
ESDA6V1L	SOT-23	2	300	5.25	20	1	6.1	7.2	15	20	140	Fig.4
ESDPLC5V0AE2	0201-A	1	40	5.50	0.05	1	6.1	8.8	15	3.0	0.2	Fig.1
ESDSL5V0L2B	DFN1006-2L	1	40	5.50	0.05	1	6.1	8.8	15	3.0	0.2	Fig.1
ESDLC0554P3	DFN1616-6L	4	240	5.50	0.1	1	6	-	22	11	2.0	Fig.23
ESDLC5V0LB	DFN1006-2	1	80	5.50	0.2	1	6	8	10	8.0	20	Fig.1
ESDLC0504P3	DFN1616-6	3	60	5.50	0.5	1	6.5	-	12	5.0	0.4	Fig.10
ESDLC3603P3	DFN1616-6	3	100	5.50	0.5	1	6.5	-	20	5.0	0.5	Fig.9
ESDLC0544P5	DFN2510-10	4	100	6.00	0.5	1	6.0	-	25	4.0	0.3	Fig.12
ESD7V0D5	SOD-523	1	200	7.00	0.03	1	7.5	-	22.7	8.8	65	Fig.2
ESD7V0LB	DFN1006-2	1	80	7.00	0.2	1	7.5	-	16	5.0	15	Fig.1
ESD7V0L	DFN1006-2	1	300	7.00	0.5	1	7.5	-	17	18	90	Fig.2
ESD0771P6	DFN1610-2	1	1875	7.00	0.5	1	7.5	-	16.5	115	550	Fig.2

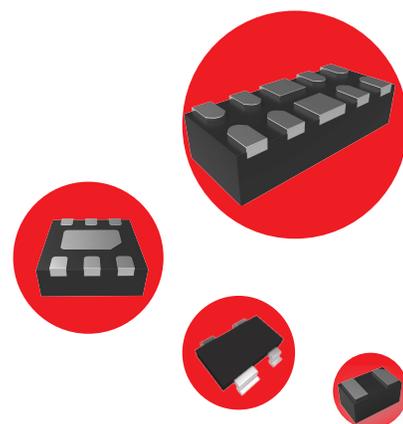
ESD Protection Devices

Part Number	Package	Channel	Peak Power Dissipation	Reverse Standoff Voltage	Maximum Reverse Leakage Current	Test Current	Breakdown Voltage		Maximum Clamping Voltage	Maximum Peak Pulse Current	Junction Capacitance	Internal Structure
			P _{PK} (W)	V _{RWM} (V)	I _R (μ A)	I _T (mA)	V _{BR} (V) Min	V _{BR} (V) Max	V _C (V)	I _{PP} (A)	C _J (pF)	
ESD7V0D9	SOD-923	1	100	7.00	1	1	8.0	-	14.8	5.0	30	Fig.2
ESD7V0P4	DFN2020-3L	1	6000	7.50	1	1	8	-	22	275	1500	Fig.35
ESDSL8V0D3B	SOD-323	1	350	8.00	0.2	1	8.5	10	19.5	18	2.0	Fig.18
ESDLC8V0D3B	SOD-323	1	350	8.00	1	1	8.5	-	31.6	18	3.0	Fig.18
ESD12VD5	SOD-523	1	240	12.00	0.02	1	14.1	-	25	9.6	55	Fig.2
ESD12VLB	DFN1006-2	1	350	12.00	0.1	1	13.3	-	25	14	50	Fig.1
ESD12VL	DFN1006-2	1	300	12.00	0.1	1	13.3	-	25	12	60	Fig.2
ESD1271P6	DFN1610-2	1	1875	12.00	0.1	1	12.6	-	25	75	500	Fig.2
SM712H	SOT-23	2	1000	12.00	0.1	1	13.3	-	25	25	75	Fig.26
ESDLC12VLB	DFN1006-2	1	100	12.00	0.2	1	13.3	-	20	5.0	7	Fig.1
SD12C	SOD-323	1	500	12.00	0.2	1	13.3	-	28	18	100	Fig.1
ESDULC12VD3B	SOD-323	1	500	12.00	0.2	1	13.3	17.8	29	12	2.0	Fig.18
SM12B	SOT-23	2	300	12.00	0.5	1	13.3	-	30	10	32	Fig.26
SL12	SOT-23	1	300	12.00	0.5	1	13.3	-	24	12	5.0	Fig.37
ESD12VD3B	SOD-323	1	350	12.00	1	1	13.5	-	15.5	1.0	100	Fig.1
ESDLC12VD3B	SOD-323	1	350	12.00	1	1	13.3	-	28.6	11	3.0	Fig.18
ESDH12VD1	SOD-123	1	4200	12.00	1	1	13	16	35	120	620	Fig.2
ESD12VD3	SOD-323	1	350	12.00	1	1	13.3	15.75	33	12	150	Fig.2
ESDN12VD3	SOD-323	1	990	12.00	1	1	13	16.5	27	30	100	Fig.2
ESDH12VD3L	SOD-323FL	1	350	12.00	1	1	13.3	-	19	15	100	Fig.2
ESD12VD7	SOD-723	1	128	12.00	1	1	13.5	-	23.7	5.4	30	Fig.2
ESD12VD9	SOD-923	1	100	12.00	1	1	13.5	-	18.4	1.0	15	Fig.2
SM712	SOT-23	2	400	12.00	1	1	13.3	-	25	13	45	Fig.26
ESD12VK4	SOT23-6L	4	220	12.00	1	1	13.3	16.5	24	9.0	45	Fig.29
ESD12VP4	DFN2020-3L	1	6000	12.00	1	1	13	-	30	200	550	Fig.35
SM12	SOT-23	2	300	12.00	1	1	13.3	15.75	19	11.2	60	Fig.4
ESDLC12VD3	SOD-323	1	350	12.00	5	1	13.3	-	28.6	11	3.0	Fig.3
ESD1524D3B	SOD-323	1	160	15.00	0.05	1	17.1	-	35	5.0	10	Fig.18
ESD15VD5	SOD-523	1	350	15.00	0.2	1	18	-	32	11	80	Fig.2
SM15B	SOT-23	2	300	15.00	0.2	1	17	-	35	8.0	25	Fig.26
SM15H	SOT-23	2	500	15.00	0.2	1	16.7	-	32	20	90	Fig.4
ESD15VL	DFN1006-2	1	300	15.00	0.5	1	16.7	20	30	10	65	Fig.2
SD15C	SOD-323	1	350	15.00	1	1	16.7	-	40	12	75	Fig.1
ESDSL16VLB	DFN1006-2	1	30	16.00	0.1	1	18	-	30	1.0	0.9	Fig.1
ESDSL18VLB	DFN1006-2	1	80	18.00	0.2	1	19	-	40	2.0	0.3	Fig.1
ESD18VD3B	SOD-323	1	400	18.00	1	1	20	-	40	10	20	Fig.1
SM22	SOT-23	2	300	22.00	1	1	27	-	44	3.0	80	Fig.4
ESD24VLB	DFN1006-2	1	300	24.00	0.1	1	27	-	40	5.0	20	Fig.1
ESD2471P6	DFN1610-2	1	1875	24.00	0.1	1	26.7	-	53.5	35	200	Fig.2
SM24B	SOT-23	2	300	24.00	0.2	1	27	-	50	4.0	20	Fig.26
SD24C	SOD-323	1	350	24.00	1	1	26.7	-	62	8.0	50	Fig.1
ESDLC24VD3B	SOD-323	1	350	24.00	1	1	26.7	33	45	6.0	3.0	Fig.18
ESD24VD5	SOD-523	1	330	24.00	1	1	26.7	33	44	7.5	36	Fig.2
ESDLC24VD3	SOD-323	1	330	24.00	1	1	26.7	33	44	7.5	36	Fig.3

ESD and Power TVS

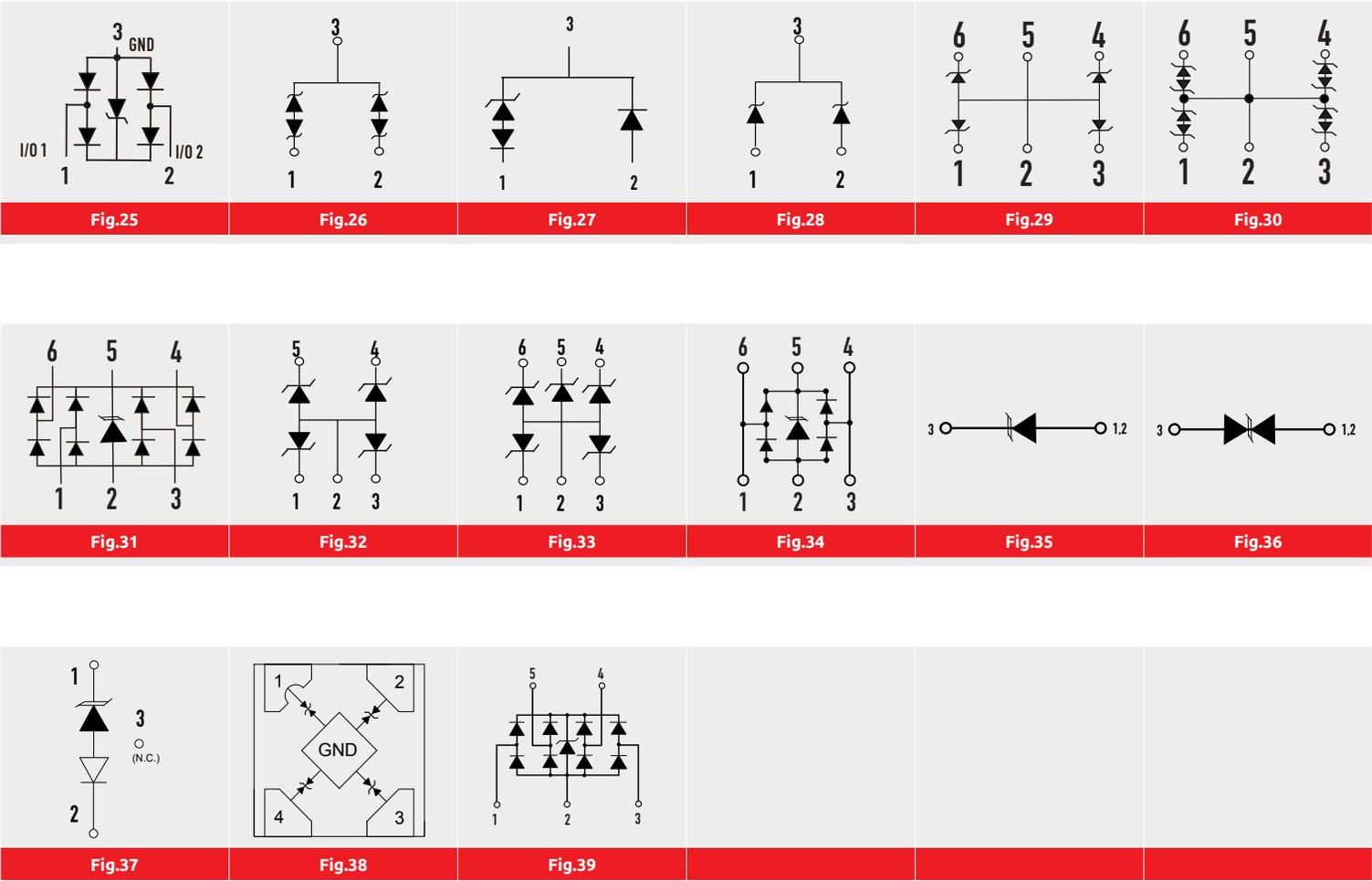
ESD Protection Devices

Part Number	Package	Channel	Peak Power Dissipation	Reverse Standoff Voltage	Maximum Reverse Leakage Current	Test Current	Breakdown Voltage		Maximum Clamping Voltage	Maximum Peak Pulse Current	Junction Capacitance	Internal Structure
			P_{PK} (W)	V_{RWM} (V)	I_R (uA)	I_T (mA)	V_{BR} (V) Min	V_{BR} (V) Max	V_C (V)	I_{PP} (A)	C_J (pF)	
SM36B	SOT-23	2	300	36.00	0.2	1	38	-	90	3.0	15	Fig.26
SD36C	SOD-323	1	240	36.00	1	1	40	48	80	3.0	15	Fig.1
SM36	SOT-23	2	240	36.00	1	1	40	48	80	3.0	30	Fig.4
ESD39VD3B	SOD-323	1	-	39.00	0.1	1	35.1	42.9	-	-	30	Fig.1
SR70	SOT-143	2	168	70.00	5	1	85	-	7.0	24	10	Fig.22



ESD and Power TVS

Internal Structure



TVS

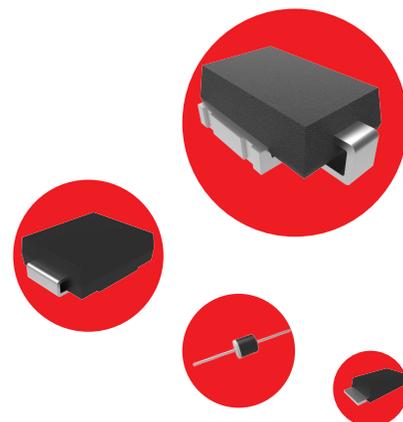
Part Number		Package	Peak Pulse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage		Test Current
Uni	Bi		P _{PK} (W)	V _{RWM} (V)	I _R (μA)	V _C (V)	I _{PP} (A)	V _{BR} (V) Min	V _{BR} (V) Max	I _T (mA)
SMF5.0A~SMF170A	SMF5.0CA~SMF170CA	SOD-123FL	200	5.0~170	1~400	9.2~275	0.6~21.7	6.4~189	7~209	1~10
SMF350A	-	SOD-123FL	200	350	1	560	0.36	391	432	1
SMAJ3.3A	-	SMA	400	3.3	600	8	43.8	5.2	6	10
SMAJ10AHE3~SMAJ85AHE3	SMAJ10CAHE3~SMAJ85CAHE3	SMA	400	10~85	1~5	17~137	2.9~23.5	11.1~94.4	12.3~104	1
SMAJ4KE12AHE3~SMAJ4KE100AHE3	SMAJ4KE12CAHE3~SMAJ4KE100CAHE3	SMA	400	10.2~85.5	1~5	16.7~137	3.0~24.6	11.4~95	12.6~105	1
SM4F5.0A~SM4F85A	-	SOD-123FL	400	5.0~85	1~800	9.2~137	2.2~43.5	6.4~94.4	7~104	1~10
SMAJP4KE6.8A~SMAJP4KE550A	SMAJP4KE6.8CA~SMAJP4KE550CA	SMA	400	5.8~495	1~1000	10.5~760	0.5~39	6.4~522.5	7.14~577.5	1~10
P4KE6.8A~P4KE550A	P4KE6.8CA~P4KE550CA	DO-41	400	5.8~495	1~1000	10.5~760	0.52~39	6.45~522.5	7.14~577.5	1~10
SMAJ5.0A~SMAJ440A	SMAJ5.0CA~SMAJ440CA	SMA	400	5~440	1~800	9.2~713	0.6~43.5	6.4~492	7~543	1~10
SMB5.0A~SMB50	-	SMB	500	5.0~50	5~300	10~88	5.8~44	7.6~55.5	-	1
SA5.0A~SA170A	SA5.0CA~SA170CA	DO-15	500	5~170	1~600	9.2~275	1.9~55.4	6.4~189	7~209	1~10
P5KE5.0A~P5KE200A	P5KE5.0CA~P5KE200CA	DO-15	500	5~200	3~600	9.2~324	1.5~54.3	6.4~220	7.25~256	1~10
SAC5.0~SAC50	-	DO-15	500	5~50	5~300	10~88	5.8~44	7.6~55.5	-	1
SMBJ3.3A	-	SMB	600	3.3	600	8	75	5.2	6	10
SAC136	-	DO-15	600	136	1	219	2.7	150	170	1
SMBJP6KE13AHE3~SMBJP6KE91AHE3	SMBJP6KE13CAHE3~SMBJP6KE91CAHE3	SMB	600	11.1~77.8	1	18.2~125.0	4.9~33.5	12.4~86.5	13.7~95.5	1
SMBJ11AHE3~SMBJ78AHE3	SMBJ11CAHE3~SMBJ78CAHE3	SMB	600	11~78	5	18.2~126	4.7~33.0	12.2~86.7	13.5~95.8	1
SMA6J13AHE3~SMA6J40AHE3	SMA6J13CAHE3~SMA6J40CAHE3	SMA	600	13~40	1	21.5~64.5	9.3~27.9	14.4~44.4	15.9~49.1	1
SMBJP6KE250AL~SMBJP6KE400AL	-	SMB	600	214~342	1	344~548	1.1~1.9	237~380	263~420	1
SMBJ220AL~SMBJ440AL	SMBJ220CAL~SMBJ440CAL	SMB	600	220~440	1	356~713	0.9~1.7	246~492	272~543	1
SMA6F5.0A~SMA6F13A	-	DO-221AC	600	5.0~13	5~800	9.2~20.4	29~68	6.4~14.4	7.07~15.9	1~10
SMBJP6KE6.8A~SMBJP6KE550A	SMBJP6KE6.8CA~SMBJP6KE550CA	SMB	600	5.8~495	1~1000	10.5~760	0.8~58.1	6.45~522.5	7.14~577.5	1~10
P6KE6.8A~P6KE600A	P6KE6.8CA~P6KE600CA	DO-15	600	5.8~512	1~1000	10.5~828	0.75~57	6.45~570	7.14~630	1~10
SMBJ5.0A~SMBJ440A	SMBJ5.0CA~SMBJ440CA	SMB	600	5~440	1~800	9.2~713	0.9~65.2	6.4~492	7~543	1~10
SMA6J5.0A~SMA6J58A	SMA6J5.0CA~SMA6J58CA	SMA	600	5~58	1~800	9.2~93.6	6.41~65.2	6.4~64.4	7~71.2	1~10
SMB10J5.0A~SMB10J120A	SMB10J5.0CA~SMB10J120CA	SMB	1000	5.0~120	1~800	9.2~193	5.18~108.7	6.4~133	7~147	1~10
SMBJ1.0KE6.8A~SMBJ1.0KE91A	SMBJ1.0KE6.8CA~SMBJ1.0KE91CA	SMB	1000	5.8~77.8	1~900	10.5~125	8~95.2	6.46~86.45	7.14~95.55	1~10
SMCJ1.5KE12AHE3~SMCJ1.5KE91AHE3	SMCJ1.5KE12CAHE3~SMCJ1.5KE91CAHE3	SMC	1500	10.2~77.8	1~5	16.7~125	12.2~91	11.4~86.5	12.6~95.5	1
SMCJ10AHE3~SMCJ78AHE3	SMCJ10CAHE3~SMCJ78CAHE3	SMC	1500	10~78	1~5	17~126	11.9~88.2	11.1~86.7	12.3~95.8	1
SMCJ220AL~SMCJ350AL	SMCJ220CAL~SMCJ250CAL	SMC	1500	220~350	1	356~567	2.6~4.2	246~391	272~432	1
SMCJ5.0A~SMCJ440A	SMCJ5.0CA~SMCJ440CA	SMC	1500	5.0~440	1~800	9.2~713	2.1~163	6.4~492	7~543	1~10
1.5KE6.8A~1.5KE550A	1.5KE6.8CA~1.5KE550CA	DO-201AE	1500	5.8~467	5~1000	10.5~760	2~144.8	6.45~522.5	7.14~577.5	1~10
SMCJ1.5KE6.8A~SMCJ1.5KE550A	SMCJ1.5KE6.8CA~SMCJ1.5KE550CA	SMC	1500	5.8~495	5~1000	10.5~760	2~144.8	6.45~522.5	7.14~577.5	1~10
LCE6.5A~LCE28A	-	DO-201AE	1500	6.5~28	5~1000	11.2~45.5	33~100	7.22~31.3	7.98~34.4	1~10
SMLJ10AHE3~SMLJ43AHE3	SMLJ10CAHE3~SMLJ43CAHE3	SMC	3000	10~43	2~15	17~69.4	43.2~176.4	11.1~47.8	12.3~52.8	5
3KP5.0A~3KP220A	3KP5.0CA~3KP220CA	R-6	3000	5~220	10~5000	9.2~371.1	8.1~326.1	6.4~244	7~270	5~50
SMLJ5.0A~SMLJ440A	SMLJ5.0CA~SMLJ440CA	SMC	3000	5~440	2~1000	9.2~713	4.21~326	6.4~492	7~543	1~10
SM5510A~SM5543A	-	DO-218AB	3600	10~43	10~15	17~69.4	52~212	15.6~47.8	17.2~52.8	5
SM6510A~SM6543A	-	DO-218AB	4600	10~43	10~15	17~69.4	66~271	11.1~47.8	12.3~52.8	5
5.0SMLJ10AHE3~5.0SMLJ58AHE3	5.0SMLJ10CAHE3~5.0SMLJ58CAHE3	SMC	5000	10~58	2~5	17.0~93.6	53.5~294.12	11.1~64.4	12.3~71.2	1
5.0SMLJ11A~5.0SMLJ400A	5.0SMLJ11CA~5.0SMLJ170CA	SMC	5000	11~400	5~800	18.2~648	7.7~275	12.2~447	13.5~494	1~10
5KP5.0A~5KP250A	5KP5.0CA~5KP250CA	R-6	5000	5~250	10~5000	9.2~425	12~543	6.4~277	7~306	5~50
-	SMF24BH	SOD-123FL	5500	24	1	32	185	26.7	29.5	1
SLD10A~SLD60A	SLD10CA~SLD60CA	R-6	6000	10~60	10	17~96.8	61.5~350	11.8~68.4	13~75.6	5

* Part Number marked red AEC-Q101 Qualified

ESD and Power TVS

TVS

Part Number		Package	Peak Pluse Power Dissipation	Reverse Standoff Voltage	Reverse Leakage	Max. Clamping Voltage	Peak Pulse Current	Breakdown Voltage		Test Current
Uni	Bi		P_{PK} (W)	V_{RWM} (V)	I_R (uA)	V_C (V)	I_{PP} (A)	V_{BR} (V) Min	V_{BR} (V) Max	I_T (mA)
SM8S10A~SM8S43A	SM8S14CA~SM8S43CA	DO-218AB	6600	10~43	10~15	17~69.4	95.1~388	11.1~47.8	12.3~52.8	5
15KP17A~15KP280A	15KP17CA~15KP280CA	R-6	15000	17~280	10~5000	29.3~452	33~512	18.9~311	20.79~342.4	5~50
30KP28A~30KP288A	30KP28CA~30KP288CA	R-6	30000	28~288	10~5000	50~469.9	64.5~606	31.28~321.7	34.24~352.2	5~50
-	AK1-076C~AK15-076C	AK	-	30~430	20	90~625	1K~15K	32~440	-	10



* Part Number marked red AEC-Q101 Qualified

Diodes

- * Wide range of zeners
- * Schottky and switching diodes
- * Standard/fast recovery rectifiers
- * Power bridges

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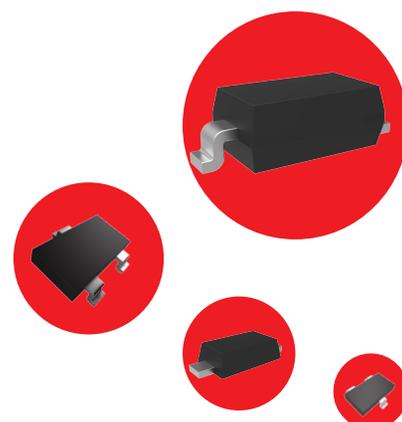
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Diodes

Pin Diodes

Part Number	Package	Power Rating	Maximum Reverse Leakage Current		Maximum Forward Voltage Drop Current		Diode Capacitance	Diode Forward Resistance
		P_D (mW)	I_R (uA)	V_R (V)	I_F (mA)	V_F (V)	C_D (pF)	R_D (Ω)
BAP50-03	SOD-323	200	0.1	50	50	1.1	1.11	40
BAP51-02	SOD-523	715	0.1	60	50	1.1	0.4	9
BAP64-04W	SOT-323	200	10	175	100	1.1	0.52	20
BAP64-05W	SOT-323	200	10	175	100	1.1	0.52	20
BAP64-06W	SOT-323	200	10	175	100	1.1	0.52	20
BAP64-04	SOT-23	250	10	175	100	1.1	0.52	20
BAP64-05	SOT-23	250	10	175	100	1.1	0.35	40
BAP64-06	SOT-23	250	10	175	100	1.1	0.52	20



Zener Diodes

Part Number	Package	Power Rating	Maximum Reverse Leakage Current		Nominal Zener Voltage		Maximum Zener Impedance		
		P _D (W)	I _R (mA)	V _R (V)	V _Z (V)	I _{ZT} (mA)	Z _{ZT} (Ω)	Z _{ZK} (Ω)	I _{ZK} (mA)
BZX584B2V4~BZX584B39	SOD-523	0.15	0.0001~0.05	1.0~27.3	2.4~39	2.0~5.0	10~130	80~600	0.5~1.0
BZX584C2V4~BZX584C39	SOD-523	0.15	0.0001~0.05	1.0~27.3	2.4~39	2.0~5.0	10~130	80~600	0.5~1.0
AZ23C2V7W~AZ23C39W	SOT-323	0.2	0.0001	0.8~29	2.7~39	5	7~95	50~500	1
BZT52B3V0JS~BZT52B75JS	SOD-323	0.2	0.000045~0.009	1.0~56	3.0~75	2.5~5.0	10~250	80~1000	0.5~1.0
BZT52C2V4S~BZT52C56S	SOD-323	0.2	0.00005~0.05	1.0~39.2	2.4~56	2.0~5.0	10~200	80~750	0.5~1.0
MMXZ5229C~MMXZ5262C	SOD-323	0.2	0.0001~0.005	1.0~39	4.3~51	2.5~20	5~125	500~2000	0.25
BZT52C2V4T~BZT52C39T	SOD-523	0.2	0.0001~0.05	1.0~27.3	2.4~39	2.0~5.0	10~130	80~600	0.5~1.0
BZT52B2V4T~BZT52B39T	SOD-523	0.2	0.0001~0.05	1.0~27.3	2.4~39	2.0~5.0	10~130	80~600	0.5~1.0
MMXZ5225B~MMXZ5259B	SOD-323	0.2	0.0001~0.05	1.0~30	3.0~39	3.2~20	5.0~80	500~2000	0.25
BZT52C2V4LS~BZT52C39LS	SOD-323	0.2	0.0001~0.05	1.0~27.3	2.4~39	2.0~5.0	10~130	80~600	0.5~1.0
BZX84C2V4W~BZX84C39W	SOT-323	0.2	0.0001~0.05	1.0~27.3	2.4~39	5	10~130	80~600	1
MMBZ5221BW~MMBZ5259BW	SOT-323	0.2	0.0001~0.1	1.0~30	2.4~39	3.2~20	5~80	500~2000	0.25
BZT52B2V4LS~BZT52B75LS	SOD-323FL	0.2	0.0001~0.12	1.0~56	2.53~75	5	30~300	60~1700	0.25~1.0
BZX984B4V7	SOD-923	0.25	0.003	2	4.7	5	80	500	1
BZT52C2V4L3P~BZT52C39L3P	DFN1006-2L	0.25	0.0001~0.05	1.0~27.3	2.4~39	2.0~5.0	10~130	80~600	0.5~1.0
AZ23C2V7~AZ23C51	SOT-23	0.3	0.0001	0.8~38	2.7~51	5	7~100	50~750	1
DZ23C2V4~DZ23C75	SOT-23	0.3	0.0001~0.1	0.8~56	2.4~75	5	7~250	80~1000	1
BZT52B5V1LS	SOD-323	0.35	0.002	1	5.1	5	80	500	1
BZX84C2V4~BZX84C75	SOT-23	0.35	0.00005~0.05	1.0~52.5	2.4~75	2~5	10~255	80~600	0.5~1.0
BZX84B2V4~BZX84B75	SOT-23	0.35	0.00005~0.05	1.0~52.5	2.4~75	2~5	10~255	80~750	0.5~1.0
MMBZ5229C~MMBZ5262C	SOT-23	0.35	0.0001~0.005	1.0~39	4.3~51	2.5~20	5~125	500~2000	0.25
MMBZ5221B~MMBZ5259B	SOT-23	0.35	0.0001~0.1	1.0~30	2.4~39	3.2~20	5~80	500~2000	0.25
BZT52B3V0BS~BZT52B51BS	SOD-323	0.4	0.000045~0.009	1.0~35.7	3.0~51	5	10~169	80~564	0.5~1.0
MMSZ4678~MMSZ4716	SOD-123	0.5	0.00001~0.01	1.0~29.6	1.8~39	0.05	-	-	-
MMSZ5229C~MMSZ5261C	SOD-123	0.5	0.0001~0.005	1.0~36	4.3~47	2.7~20	5~105	500~2000	0.25
BZT52C2V4~BZT52C75	SOD-123	0.5	0.0001~0.05	1.0~56	2.4~75	2~5	10~250	80~1000	0.5~1.0
MMSZ5221B~MMSZ5267B	SOD-123	0.5	0.0001~0.1	1.0~56	2.4~75	1.7~20	5~270	500~2000	0.25
BZT52B2V4~BZT52B75	SOD-123	0.5	0.0001~0.1	0.8~56	2.4~75	2~5	7~250	80~1000	1
SMA1EZ110DSHE3~SMA1EZ330DSHE3	SMA	1	0.0001	83.6~250.2	110~330	0.7~2.3	450~2500	4000~9500	0.25
SMA1EZ110DS~SMA1EZ330DS	SMA	1	0.0001	83.6~250.2	110~330	0.7~2.3	450~2500	4000~9500	0.25
1EZ110DS~1EZ330DS	DO-41	1	0.0001	83.6~250.2	110~330	0.7~2.3	450~2500	4000~9500	0.25
BZV49C3V3	SOT-89	1	0.001	1	3.3	5	95	600	1
DFLZ5V1~DFLZ200	SOD-123FL	1	0.0001~0.01	1.0~150	5.1~200	2.3~100	2~450	-	-
SMAZ10HE3~SMAZ39HE3	SMA	1	0.0005~0.001	7.6~29.6	10~39	10~50	4.0~40	150~450	1
SMAZ5V1~SMAZ39	SMA	1	0.0005~0.005	1.0~29.6	5.1~39	10~100	2.0~40	150~500	1.0~2.0
SMAJ4733A~SMAJ4761A	SMA	1	0.005~0.01	1.0~56	5.1~75	3.3~49	2.0~175	550~2000	0.25~1.0
SMAJ4740AHE3~SMAJ4764AHE3	SMA	1	0.005~0.01	7.6~76	10~100	2.5~25	7.0~350	700~3000	0.25
1N4736AP~1N4764AP	DO-41	1	0.005~0.01	4.0~76	6.8~100	2.5~37	3.5~350	700~3000	0.25~1.0
1EZ6.2DS~1EZ39DS	DO-41	1	0.005~0.01	3.0~29.7	6.2~39	6.4~40.3	2~60	700~1000	0.25~1.0
SMAJ5925BHE3~SMAJ5956BHE3	SMA	1.5	0.001~0.005	8.0~152	10~200	1.9~37.5	4.5~1200	500~8000	0.25
SMAJ5918B~SMAJ5956B	SMA	1.5	0.001~0.005	2.0~152	5.1~200	1.9~73.5	2.0~1200	200~8000	0.25~1.0
SMBJ5918B~SMBJ5956B	SMB	1.5	0.001~0.005	2.0~152	5.1~200	1.9~73.5	2.0~1200	200~8000	0.25~1.0
SMBJ5925BHE3~SMBJ5956BHE3	SMB	1.5	0.001~0.005	8.0~152	10~200	1.9~37.5	4.5~1200	500~8000	0.25
1N5920BP~1N5956BP	DO-41	1.5	0.001~0.005	4.0~152	6.2~200	1.9~60.5	2~1200	200~8000	0.25~1.0

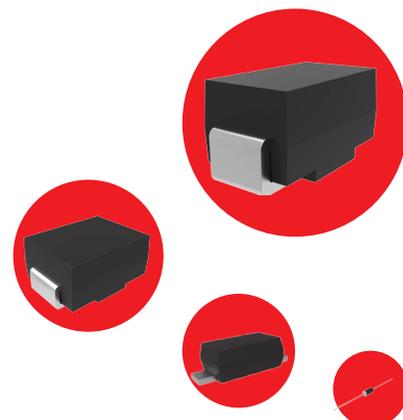
* Part Number marked red AEC-Q101 Qualified

Diodes

Zener Diodes

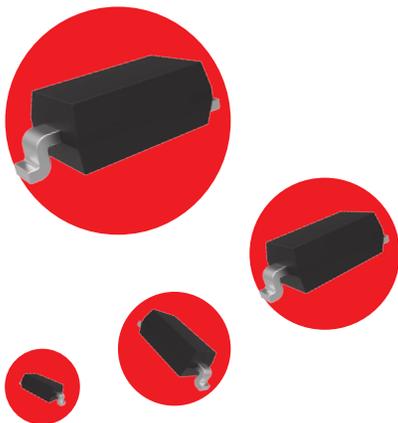
Part Number	Package	Power Rating	Maximum Reverse Leakage Current		Nominal Zener Voltage		Maximum Zener Impedance		
		P_D (W)	I_R (mA)	V_R (V)	V_Z (V)	I_{ZT} (mA)	Z_{ZT} (Ω)	Z_{ZK} (Ω)	I_{ZK} (mA)
SMA2EZ10D5HE3~SMA2EZ75D5HE3	SMA	2	0.0005~0.003	7.6~56	10~75	6.7~50	3.5~90	700~2000	0.25
SMB2EZ10D5HE3~SMB2EZ75D5HE3	SMB	2	0.0005~0.003	7.6~56	10~75	6.7~50	3.5~90	700~2000	0.25
SMA2EZ5.1D5~SMA2EZ75D5	SMA	2	0.0005~0.005	1.0~56	5.1~75	6.7~98	1.5~90	500~2000	0.25~1.0
SMB2EZ5.1D5~SMB2EZ75D5	SMB	2	0.0005~0.005	1.0~56	5.1~75	6.7~98	1.5~90	500~2000	0.25~1.0
2EZ5.1D5~2EZ75D5	DO-41	2	0.0005~0.005	1.0~56	5.1~75	6.7~98	1.5~90	500~2000	0.25~1.0
SMA3EZ6.2D5~SMA3EZ270D5	SMA	3	0.0005~0.005	3.0~200	6.2~270	2.0~121	1.5~1000	700~9000	0.25~1.0
SMB3EZ5.6D5~SMB3EZ200D5	SMB	3	0.0005~0.005	2~152	5.6~200	3.7~134	1.5~875	600~8000	0.25~1
3EZ5.1D5~3EZ75D5	DO-15	3	0.0005~0.005	1.0~56	5.1~75	10~147	1.5~85	550~2000	0.25~1.0
3SMAJ5925BHE3~3SMAJ5956BHE3	SMA	3	0.001~0.005	8.0~152	10~200	1.9~37.5	4.5~1200	500~8000	0.25
3SMAJ5918B~3SMAJ5956B	SMA	3	0.001~0.005	2.0~152	5.1~200	1.9~73.5	2.0~1200	200~8000	0.25~1.0
3SMBJ5925BHE3~3SMBJ5956BHE3	SMB	3	0.001~0.005	8.0~152	10~200	1.9~37.5	4.5~1200	500~8000	0.25
3SMBJ5918B~3SMBJ5956B	SMB	3	0.001~0.005	2.0~152	5.1~200	1.9~73.5	2.0~1200	200~8000	0.25~1.0
1N5918B3P~1N5956B3P	DO-41	3	0.001~0.005	2.0~152	5.1~200	1.9~73.5	2~1200	200~8000	0.25~1.0
SMBJ5347BHE3~SMBJ5388BHE3	SMB	5	0.0005~0.005	7.6~152	10~200	5.0~125	2.0~480	75~1850	1
SMBJ5338B~SMBJ5388B	SMB	5	0.0005~0.01	1.0~152	5.1~200	5.0~240	1.0~480	75~1850	1
1N5338B~1N5388B	DO-15	5	0.0005~0.01	1.0~152	5.1~200	5.0~240	1.0~480	75~1850	1

* Part Number marked red AEC-Q101 Qualified



RF Switching Diodes

Part Number	Package	Power Rating	Forward Current	Reverse Voltage	Diode Capacitance	Diode Forward Resistance
		P_D (mW)	$I_{F(AV)}$ (A)	V_R (V)	C_D (pF)	R_D (Ω)
KI592	SOD-323	0.5	0.1	50	2.0	0.7



Diodes

Bridge Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)
MB0540SLP	DFN3030-4L	0.5	40	8	0.52	10	0.5
MB05S~MB10S	MBS-1	0.5	50~1000	35	1	5	0.4
MBL1S~MBL10S	MBLS-1	0.5	100~1000	35	1	10	0.4
RMB2S~RMB6S	MBS-1	0.5	200~600	30	1.25	5	0.4
MB1YS	MBS-1	0.8	1600	35	1	5	0.4
LMB12S~LMB110S	LMBS-1	1	20~100	30	0.55	100	0.5
DB101~DB107	DB-1	1	50~1000	30	1.1	10	1
DB101L~DB107L	DBL-1	1	50~1000	30	1.05	10	1
SDB101~SDB107	SDB-1	1	50~1000	30	1.1	10	1
SDB101L~SDB107L	SDBL-1	1	50~1000	30	1.1	10	1
SLMB2S~SLMB6S	LMBS-1	1	200~600	30	0.95~1.7	10	0.5
LMB2S~LMB10S	LMBS-1	1	200~1000	30	0.95	5	0.4
DB151~DB157	DB-1	1.5	50~1000	50	1.1	10	1.5
DB151L~DB157L	DBL-1	1.5	50~1000	45	1.1	10	1.5
SDB151~SDB157	SDB-1	1.5	50~1000	50	1.1	5	1.5
SDB151L~SDB157L	SDBL-1	1.5	50~1000	50	1.1	10	1.5
LMB24S~LMB210S	LMBS-1	2	40~100	50	0.5	500	1
LMB203S~LMB207S	LMBS-1	2	200~1000	50	0.95	5	1
FLMB207S	LMBS-1	2	1000	50	1.3	5	1
UD2KB05~UD2KB100	D3K	2	50~1000	75	1	10	1
DB201~DB207	DB-1	2	50~1000	60	1.1	10	2
DB201L~DB207L	DBL-1	2	50~1000	60	1.1	10	2
GBL2005~GBL210	GBL	2	50~1000	80	1.05	10	1
KBP2005G~KBP210G	GBP	2	50~1000	60	1.05	10	2
SDB201~SDB207	SDB-1	2	50~1000	60	1.2	10	2
SDB201L~SDB207L	SDBL-1	2	50~1000	60	1.1	5	2
TBS20A~TBS20M	TBS	2	50~1000	75	1.1	5	2
TBS22A~TBS22M	TBS	2.2	50~1000	90	0.95	5	2
RTBS30M	TBS	3	1000	90	1.3	5	1.5
LMB32S~LMB310S	LMBS-1	3	20~100	70	0.55	500	1.5
UD3KB05~UD3KB10	D3K	3	50~1000	90	1	10	1.5
KBP3005G~KBP310G	GBP	3	50~1000	80	1.1	10	2
TBS30A~TBS30M	TBS	3	50~1000	95	0.95	5	1.5
GBU4JL	GBU	4	600	150	0.9	10	4
GBU4KL	GBU	4	800	150	0.9	10	4
UD4KB05~UD4KB100	D3K	4	50~1000	130	1	10	2
GBL4005~BPC01~GBL410~BPC01	GBL	4	50~1000	150	1	5	2
KBP4005G~KBP410G	GBP	4	50~1000	110	1.05	10	2
GBU4A~GBU4M	GBU	4	50~1000	160	1	5	2
KBJA4005~KBJA410	JB	4	50~1000	120	1.05	10	2
KBJ4005G~KBJ410G	KBJ	4	50~1000	150	1	5	2
RS401GL~RS407GL	RS-4L	4	50~1000	200	1.1	5	4
TBL4005~TBL410	TBL	4	50~1000	120	0.95	5	2
UD6KB05~UD6KB100	D3K	6	50~1000	170	1	10	3

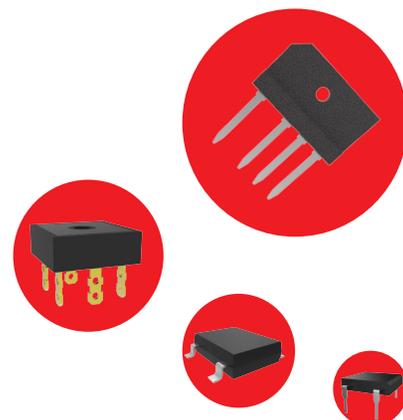
Bridge Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)
GBJ6005~GBJ610	GBJ	6	50~1000	170	1	5	3
GBL6005~GBL610	GBL	6	50~1000	135	1	5	3
GBU6A~GBU6M	GBU	6	50~1000	175	1	5	3
GBJA6005~GBJA610	JA	6	50~1000	135	1.1	10	3
KBJA6005~KBJA610	JB	6	50~1000	135	1.05	10	3
KBJ6005G~KBJ610G	KBJ	6	50~1000	170	1	5	3
PB605~PB610	PB-6	6	50~1000	150	1	10	3
RS601~RS607	RS-6	6	50~1000	200	1.1	10	3
TBL6005~TBL610	TBL	6	50~1000	150	0.95	5	3
UD8KB05~UD8KB100	D3K	8	50~1000	175	0.95	5	4
GBJ8005~GBJ810	GBJ	8	50~1000	170	1	5	4
GBU8A~GBU8M	GBU	8	50~1000	220	1	5	4
GBJA8005~GBJA810	JA	8	50~1000	150	1.1	10	4
KBJA8005~KBJA810	JB	8	50~1000	150	1.1	10	4
PB805~PB810	PB-10	8	50~1000	250	1.1	10	4
RS801~RS807	RS-6	8	50~1000	300	1.1	10	4
GBU10KL	GBU	10	800	200	0.9	5	5
GBJ10005~GBJ1010	GBJ	10	50~1000	170	1.05	10	5
GBU10A~GBU10M	GBU	10	50~1000	240	1	5	5
GBJA10005~GBJA1010	JA	10	50~1000	150	1.1	10	5
KBJA10005~KBJA1010	JB	10	50~1000	150	1.1	10	5
KBJ10005G~KBJ1010G	KBJ	10	50~1000	170	1	5	5
BR1005~BR1010	PB-6	10	50~1000	150	1.1	10	5
RS1001~RS1007	RS-6	10	50~1000	250	1	10	5
MB1505W	MB-35W	15	50	300	1.2	10	7.5
MP156W	MP-50W	15	600	300	1.1	5	7.5
GBU15KL	GBU	15	800	240	0.93	5	7.5
GBJ15005~GBJ1510	GBJ	15	50~1000	240	1	10	7.5
GBPC15005~GBPC1510	GBPC	15	50~1000	250	1.1	5	7.5
GBU15A~GBU15M	GBU	15	50~1000	240	1.1	5	7.5
GBJA15005~GBJA151	JA	15	50~1000	220	1.05	10	7.5
GBJ1506L~GBJ1508L	GBJ	15	600~800	380	0.92	5	7.5
GBJ20005~GBJ2010	GBJ	20	50~1000	240	1.05	10	10
GBU20005~GBU2010	GBU	20	50~1000	240	1.1	5	10
GBJA20005~GBJA2010	JA	20	50~1000	240	1.1	10	10
MB251W	MB-35W	25	100	300	1.2	10	12.5
GBJ2508L	GBJ	25	800	420	0.92	5	12.5
GBJ2510H	GBJ	25	1600	400	1.2	10	12.5
GBJ25005~GBJ2510	GBJ	25	50~1000	350	1	10	12.5
GBPC25005~GBPC2510	GBPC	25	50~1000	300	1.1	5	12.5
GBPC25005W~GBPC2510W	GBPC-W	25	50~1000	300	1.1	5	12.5
GBU25005~GBU2510	GBU	25	50~1000	300	1	10	12.5
GBJA25005~GBJA2510	JA	25	50~1000	350	1.05	10	12.5
MB2505~MB2510	MB-35	25	50~1000	300	1.1	10	12.5

Diodes

Bridge Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)
PB25005~PB2510	PB	25	50~1000	350	1	5	12.5
GBJ3508L	GBJ	35	800	420	0.95	5	17.5
MP358W	MP-50W	35	800	400	1.1	5	17.5
MT3504A~MT3516A	MT-35A	35	400~1600	400	1.2	10	17.5
GBJ35005~GBJ3510	GBJ	35	50~1000	400	1.05	10	17.5
GBPC35005~GBPC3510	GBPC	35	50~1000	400	1.1	5	17.5
GBPC35005W~GBPC3510W	GBPC-W	35	50~1000	400	1.1	5	17.5
MB3505~MB3510	MB-35	35	50~1000	400	1.1	10	17.5
PB35005~PB3510	PB	35	50~1000	400	1	5	17.5
3GBJ3508~3GBJ3516	TSB-5	35	800~1600	400	1.1	10	17.5
GBJ5006L	GBJ	50	600	420	0.97	5	25
GBPC5012	GBPC	50	1200	500	1.1	5	25
GBPC5012H	GBPC-H	50	1200	500	1.1	5	25
GBJ50005~GBJ5010	GBJ	50	50~1000	400	1	10	25
GBPC50005~GBPC5010	GBPC	50	50~1000	500	1.1	5	25
MP5005~MP5010	MP-50	50	50~1000	500	1.2	10	25
MP5005W~MP5010W	MP-50W	50	50~1000	450	1.1	10	25
MT5004A~MT5016A	MT-35A	50	50~1000	500	1.2	10	25
PB50005~PB5010	PB	50	50~1000	450	1.05	5	25



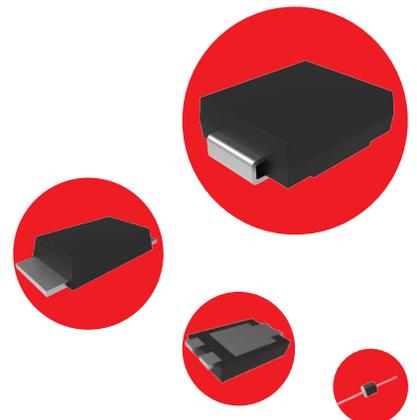
Standard Recovery Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_f (V)	I_R (uA)	I_{FM} (A)
R4000GPS	DO-41	0.2	4000	15	3.5	5	0.5
R3000GP~R6000GP	DO-15	0.2	3000~6000	15	2.3	5	0.5
1N4001~1N4007	DO-41	1	50~1000	30	1	5	1
1N4001GP~1N4007GP	DO-41	1	50~1000	30	1.1	5	1
GS1AE~GS1ME	SMA	1	50~1000	30	1.1	5	1
GS1AE-TPS05~GS1ME-TPS05	SMAE	1	50~1000	30	1.1	10	1
GS1AFL~GS1MFL	DO-221AC	1	50~1000	30	1	10	1
GS1A-L~GS1M-L	SMA	1	50~1000	30	1	5	1
M1FL~M7FL	DO-221AC	1	50~1000	30	1.1	5	1
RL101GP~RL107GP	A-405	1	50~1000	30	1.1	5	1
RL101~RL107	A-405	1	50~1000	30	1.1	5	1
S1A-L~S1M-L	SMB	1	50~1000	30	1.1	5	1
SM4001PL~SM4007PL	SOD-123FL	1	50~1000	30	1.1	5	1
1N4004W	SOD-123	1	400	7.5	1.1	5	1
BY133GP	DO-41	1	1300	30	1.1	5	1
GS1R-L	SMA	1	1300	30	1	5	1
GS1Y-L	SMA	1	1600	30	1.25	5	1
S1YA	SMA	1	1600	30	1.25	5	1
GS1Z-L	SMA	1	2000	30	1.15	5	1
S1Z-L	SMB	1	2000	30	1.2	5	1
EM513GP~EM518GP	DO-41	1	1600~2000	25	1.25	5	1
1N5391~1N5399	DO-15	1.5	50~1000	50	1.1	5	1.5
1N5391GP~1N5399GP	DO-15	1.5	50~1000	50	1.4	5	1.5
SM5391PL~SM5399PL	SOD-123FL	1.5	50~1000	50	1.1	5	1.5
GS2Y-L	SMA	1.5	1600	30	1.15	3	1.5
S2Y-L	SMB	1.5	1600	30	1.15	5	1.5
GS2AFL~GS2MFL	DO-221AC	2	50~1000	50	1.1	5	2
GS2A-L~GS2M-L	SMA	2	50~1000	50	1.1	5	2
RL201GP~RL207GP	DO-15	2	50~1000	70	1	5	2
RL201~RL207	DO-15	2	50~1000	60	1	5	2
S2A-L~S2M-L	SMB	2	50~1000	50	1.15	5	2
RL251GP~RL257GP	R-3	2.5	50~1000	70	1.1	5	2.5
1N5400~1N5408	DO-201AD	3	50~1000	200	1	5	3
1N5400GP~1N5408GP	DO-201AD	3	50~1000	200	1.1	5	3
S3AB~S3MB	SMB	3	50~1000	100	1.15	10	3
S3A~S3M	SMC	3	50~1000	100	1.2	10	3
S3Q	SMC	3	1200	100	1.2	10	3
1N5413GP	DO-201AD	3	1300	100	1.1	5	3
1N5416GP	DO-201AD	3	1600	100	1.2	5	3
S5AL~S5ML	SMC	5	50~1000	100	1.15	5	5
TGS5G	TO-277B	5	400	150	1.1	5	5
60S05~60S10	DO-201AD	6	50~1000	200	1	5	6
6A05~6A10	R-6	6	50~1000	400	0.95	10	6
6A05G~6A10G	R-6	6	50~1000	200	1	10	6

Diodes

Standard Recovery Rectifiers

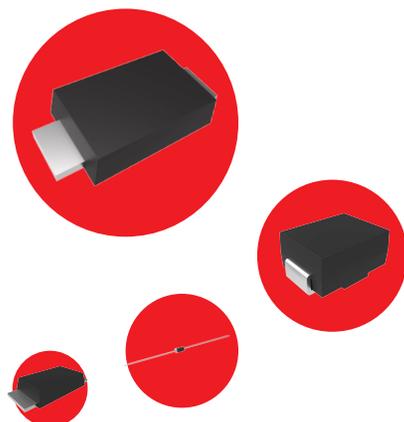
Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_f (V)	I_R (uA)	I_{FM} (A)
DR750~DR7510	R-6	6	50~1000	200	1.1	10	6
SMLJ60S05~SMLJ60S10	SMC	6	50~1000	200	1	5	6
S8AL~S8ML	SMC	8	50~1000	200	1.05	5	8
S10DLHE3	SMC	10	200	200	1	5	10
10A01~10A07	R-6	10	50~1000	400	1	10	10
10A01GP~10A07GP	R-6	10	50~1000	300	1	5	10
S10AL~S10ML	SMC	10	50~1000	200	1.2	10	10
F1200D	R-6	12	150	390	0.87	5	12



* Part Number marked red AEC-Q101 Qualified

Fast Recovery Rectifiers

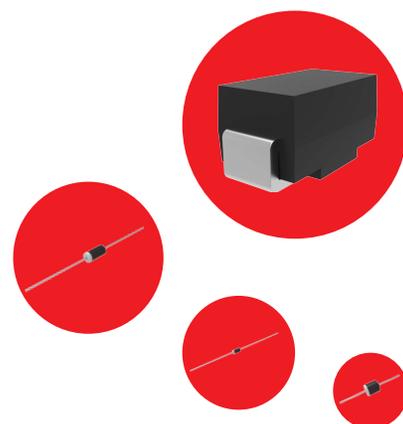
Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Reverse Recovery Time
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	T_{RR} (μs)
1N4933GP~1N4937GP	DO-41	1	50~600	30	1.2	5	1	0.2
FR1A-L~FR1M-L	SMB	1	50~1000	30	1.3	5	1	0.15~0.5
FS1AFL~FS1MFL	DO-221AC	1	50~1000	30	1.3	5	1	0.15~0.5
FS1A-L~FS1M-L	SMA	1	50~1000	30	1.3	5	1	0.15~0.5
FSM11PL~FSM17PL	SOD-123FL	1	50~1000	30	1.3	5	1	0.15~0.5
1N4942GP~1N4948GP	DO-41	1	200~1000	25	1.3	5	1	0.15
BA157GP~BA159GP	DO-41	1	400~1000	30	1.3	5	1	0.15
FR101GP~FR107GP	DO-41	1	50~1000	30	1.3	5	1	0.15~0.5
FR151GP~FR157GP	DO-15	1.5	50~1000	50	1.3	5	1.5	0.15~0.5
FR201GP~FR207GP	DO-15	2	50~1000	60	1.3	5	2	0.15~0.5
FR2A-L~FR2M-L	SMB	2	50~1000	50	1.3	5	2	0.15~0.5
FS2AFL~FS2MFL	DO-221AC	2	50~1000	50	1.3	5	2	0.15~0.5
FS2A-L~FS2M-L	SMA	2	50~1000	50	1.3	5	2	0.15~0.5
FR301GP~FR307GP	DO-201AD	3	50~1000	150	1.3	5	3	0.15~0.5
FR3AB~FR3MB	SMB	3	50~1000	100	1.3	10	3	0.15~0.5
FR3A~FR3M	SMC	3	50~1000	100	1.3	10	3	0.15~0.5
FR501GP~FR507GP	DO-201AD	5	50~1000	200	1.35	10	5	0.15~0.5
PB62F	PB-6	6	200	150	1.3	10	3	0.2
FR601GP~FR607GP	R-6	6	50~1000	200	1.3	10	6	0.15~0.5
FR1001GP~FR1007GP	R-6	10	50~1000	250	1.3	5	10	0.15~0.5



Diodes

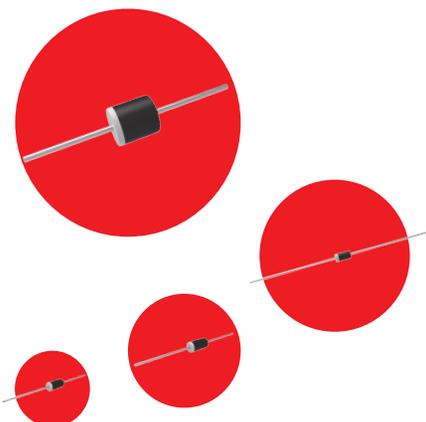
High Voltage Fast Recovery Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Reverse Recovery Time
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	T_{RR} (μs)
FM2000GP	SMA	0.5	2000	30	2.5	5	0.5	0.5
R2000FGP	DO-41	0.5	2000	30	2.5	5	0.5	0.5
R3000FGP	DO-41	0.2	3000	20	5	5	0.5	0.3
R5000FGP	DO-15	0.5	5000	20	6	5	0.5	0.3
R6000FGP	DO-15	0.5	6000	20	6	5	0.5	0.3



High Efficient Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Reverse Recovery Time
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	T_{RR} (μs)
HER101G~HER108G	DO-41	1	50~1000	30	1~1.7	5	1	0.05~0.075
HER201G~HER208G	DO-15	2	50~1000	60	1~1.7	5	2	0.05~0.075
HER301G~HER308G	DO-201AD	3	50~1000	125	0.95~1.7	10	3	0.05~0.075
HER501GP~HER508GP	DO-201AD	5	50~1000	160	1~1.7	5	5	0.05~0.075
HER601GP~HER608GP	R-6	6	50~1000	200	1~1.7	10	6	0.05~0.075



Diodes

Super Fast Recovery Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Reverse Recovery Time
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	T_{RR} (μs)
MURS1A~MURS1D	SMA	1	50~200	30	0.92	5	1	0.015
UG1APL~UG1GPL	SOD-123FL	1	50~400	30	0.92~1.25	5	1	0.025
UG1A~UG1G	SMA	1	50~400	30	0.92~1.25	5	1	0.025
ER1A-L~ER1J-L	SMB	1	50~600	30	0.95~1.7	5	1	0.035
ES1A-L~ES1J-L	SMA	1	50~600	30	0.95~1.7	1	1	0.035
MUR105GP~MUR160GP	DO-41	1	50~600	35	0.97~1.35	5	1	0.045~0.06
SF11G~SF18G	DO-41	1	50~600	30	0.95~1.7	5	1	0.035
SFM11PL~SFM18PL	SOD-123FL	1	50~600	30	0.95~1.7	5	1	0.035
UF1A~UF1M	SMB	1	50~1000	30	1~1.7	10	1	0.05~0.1
UF4001GP~UF4007GP	DO-41	1	50~1000	30	1~1.7	5	1	0.05~0.075
UFM11PL~UFM17PL	SOD-123FL	1	50~1000	30	1~1.7	10	1	0.035~0.075
US1AFL~US1MFL	DO-221AC	1	50~1000	30	1~1.7	10	1	0.05~0.075
US1A~US1M	SMA	1	50~1000	30	1~1.7	5	1	0.05~0.075
ES1DFL~ES1KFL	DO-221AC	1	200~800	30	1~1.85	5	1	0.035
MURS1DBL	SMB	1	200	40	0.9	2	1	0.025
MURS1G	SMA	1	400	30	1.25	5	1	0.025
MURS1J	SMA	1	600	30	1.25	5	1	0.075
MURS1JAL	SMA	1	600	30	1.4	5	1	0.035
MURS1JBL	SMB	1	600	35	1.25	5	1	0.05
SF18GL	DO-41	1	600	35	1.25	5	1	0.05
UG4005	DO-41	1	600	30	1.25	5	1	0.075
HS1K	SMA	1	800	30	2.2	5	1	0.035
US1ML	SMA	1	1000	30	1.5	5	1	0.12
ER1Q-L	SMB	1	1200	30	1.85	5	1	0.15
UF4012GP	DO-41	1	1200	30	1.85	5	1	0.15
US1Q	SMA	1	1200	30	1.9	5	1	0.075
ER2A-L~ER2J-L	SMB	2	50~600	50	0.95~1.7	5	2	0.035
SF21G~SF28G	DO-15	2	50~600	50	0.95~1.7	5	2	0.035
ES2AFL~ES2KFL	DO-221AC	2	50~800	50	1~1.85	5	2	0.035
ES2A-L~ES2J-L	SMA	2	50~800	50	0.95~1.7	5	2	0.035
US2AA~US2MA	SMA	2	50~1000	50	1~1.7	5	2	0.05~0.075
US2AFL~US2MFL	DO-221AC	2	50~1000	50	1~1.7	5	1	0.05~0.075
US2A~US2Q	SMB	2	50~1200	50	1~1.7	5	2	0.05~0.1
UG3AB~UG3GB	SMB	3	50~400	90	0.92~1.25	5	3	0.025
SF31G~SF38G	DO-201AD	3	50~600	125	0.95~1.75	5	3	0.035
ER3AB~ER3MB	SMB	3	50~1000	100	0.95~1.7	5	3	0.035~0.075
ER3A~ER3M	SMC	3	50~1000	100	0.95~1.7	5	3	0.035~0.075
UF5400GP~UF5408GP	DO-201AD	3	50~1000	100	0.95~1.7	10	3	0.05~0.075
MURS2D	SMB	2	200	50	0.92	2	2	0.025
MURS2DAFL	DO-221AC	2	200	50	0.92	2	2	0.025
SF26GS	DO-15	2	400	50	1.3	5	2	0.035
MUR260GPL	DO-15	2	600	50	1.35	5	2	0.05
MURS2J	SMB	2	600	50	1.25	5	2	0.05
HS2K	SMB	2	800	50	1.85	5	2	0.035

Super Fast Recovery Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Reverse Recovery Time
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	T_{RR} (μs)
MURS3D	SMC	3	200	100	0.92	5	3	0.035
MURS3G	SMC	3	400	100	1	5	3	0.035
MURS3GB	SMB	3	400	100	1	5	3	0.035
UF5404GPL	DO-201AD	3	400	150	1	5	3	0.05
ER3JL	SMC	3	600	120	1.25	5	3	0.05
MURS3JAFL	DO-221AC	3	600	100	1.7	5	3	0.035
MURS3JB	SMB	3	600	100	1.25	10	3	0.05
SF41G~SF48G	DO-201AD	4	50~600	150	0.95~1.75	5	4	0.035
MUR405GP~MUR4100GP	DO-201AD	4	50~1000	150	1~1.85	10	4	0.045~0.075
NUR440GP~NUR460GP	DO-201AD	4	400~600	100	1.25	10	4	0.05
MURD420	DPAK	4	200	90	0.84	100	4	0.028
MURS4J	SMC	4	600	125	1.28	5	4	0.05
MURS480GP	DO-201AD	4	800	125	1.85	5	4	0.075
ER5A~ER5J	SMC	5	50~600	175	1~1.7	10	5	0.035
SF51G~SF58G	DO-201AD	5	50~600	150	0.95~1.75	5	5	0.035
US5A~US5M	SMC	5	50~1000	150	1~1.7	10	5	0.05~0.075
MURS540F	ITO-220AC	5	400	60	1.28	10	5	0.035
MURD560	DPAK	5	600	110	1.4	10	5	0.035
MURD560C	DPAK	5	600	110	1.4	10	5	0.035
MURD560S	DPAK	5	600	50	1.7	5	5	0.035
MURD5120	DPAK	5	1200	80	2.2	5	5	0.065
MUR605CT~MUR660CT	TO-220AB	6	50~600	60	0.975~1.7	5	3	0.035~0.075
MUR605FCT~MUR660FCT	ITO-220AB	6	50~600	80	0.975~1.7	5	3	0.035~0.075
SF61G~SF68G	DO-201AD	6	50~600	150	0.975~1.7	5	6	0.035
TES6D	TO-277B	6	200	150	0.92	2	6	0.025
UG6D	SMC	6	200	120	0.95	5	6	0.025
MURS640FCT	ITO-220AB	6	400	80	1.25	5	3	0.035
MUR805~MUR860	TO-220AC	8	50~600	125	0.975~1.5	5	8	0.035~0.05
MUR810F~MUR860F	ITO-220AC	8	100~600	125	0.975~1.5	5	8	0.035~0.05
MURB820	D2-PAK	8	200	125	0.95	10	8	0.04
MURD820	DPAK	8	200	80	1.05	10	8	0.025
MURS820	TO-220AC	8	200	125	0.975	5	8	0.025
MURD860	DPAK	8	600	80	3	10	8	0.025
MUR880	TO-220AC	8	800	125	1.9	10	8	0.1
MURD880	DPAK	8	800	80	2.4	10	8	0.033
MUR8120	TO-220AC	8	1200	110	2.3	10	8	0.065
MUR8120F	ITO-220AC	8	1200	110	2.3	10	8	0.065
MUR1005FCT~MUR1060FCT	ITO-220AB	10	50~600	80	0.975~1.5	10	5	0.035~0.05
MUR1005~MUR1060	TO-220AC	10	50~600	100	1.3~1.5	5	10	0.035~0.05
MUR1010CT~MUR1060CT	TO-220AB	10	100~600	80	0.975~1.7	10	5	0.035~0.05
MURB1010CT~MURB1060CT	D2-PAK	10	100~600	100	0.95~1.5	10	5	0.035~0.05
MUR1020F~MUR1060F	ITO-220AC	10	200~600	125	1.15~1.6	5	10	0.035~0.05
MURD1020CT	DPAK	10	200	80	0.95	10	5	0.025
MURD1040C	DPAK	10	400	125	1.5	10	10	0.035

Diodes

Super Fast Recovery Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Reverse Recovery Time
		$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	T_{RR} (μs)
MURS1040CT	TO-220AB	10	400	125	1.1	10	5	0.035
SF1040FCT	ITO-220AB	10	400	80	1.3	5	5	0.035
MURD1060	DPAK	10	600	80	1.55	10	10	0.035
MURS1060F	ITO-220AC	10	600	150	1.6	5	10	0.035
MUR10100A	TO-247AC	10	1000	110	2.4	10	10	0.065
MURB10120C	D2-PAK	10	1200	110	2.4	10	10	0.075
MURSB1260	D2-PAK	12	600	110	2.45	10	12	0.025
MUR1560FH	ITO-220AC	15	600	180	1.55	3	15	0.035
MUR1560H	TO-220AC	15	600	180	1.65	3	15	0.035
MURSB1560	D2-PAK	15	600	160	2.29	10	15	0.025
MUR15120	TO-220AC	15	1200	150	2.4	10	15	0.075
MUR15120F	ITO-220AC	15	1200	110	2.7	10	15	0.065
MUR15120H	TO-220AC	15	1200	280	3.2	10	15	0.05
MURB15120C	D2-PAK	15	1200	150	2.4	10	15	0.075
MUR1605CT~MUR1660CT	TO-220AB	16	50~600	100	0.975~1.7	5	8	0.035~0.05
MUR1605FCT~1660FCT	ITO-220AB	16	50~600	120	0.975~1.7	5	8	0.035~0.05
MUR1605F~MUR1660F	ITO-220AC	16	50~600	200	0.975~1.5	5	16	0.035~0.05
MUR1605~MUR1660	TO-220AC	16	50~600	200	0.975~1.5	5	16	0.035~0.05
MURS1640CT	TO-220AB	16	400	160	1.35	5	8	0.035
MUR2010CT~MUR2060CT	TO-220AB	20	100~600	125	0.975~1.5	10	10	0.035~0.05
MUR2010FCT~MUR2060FCT	ITO-220AB	20	100~600	125	0.975~1.5	1	10	0.035~0.05
MUR2020PT	TO-247	20	200	125	1	10	10	0.03
MURB2020C	D2-PAK	20	200	350	1.15	10	20	0.035
MURD2020CT	DPAK	20	200	250	0.9	10	10	0.03
MUR2030PT	TO-247	20	300	125	1.2	10	10	0.03
UG2030FCTH	ITO-220AB	20	300	150	1.25	10	10	0.025
MUR2040PT	TO-247	20	400	160	1.4	10	10	0.035
MURB2060C	D2-PAK	20	600	350	1.6	10	20	0.05
MURB2540C	D2-PAK	25	400	480	1.35	10	25	0.05
MUR3030PT	TO-247	30	300	180	1.35	5	15	0.035
MUR3040PT	TO-247	30	400	140	1.45	10	15	0.045
MUR3060A	TO-247AC	30	600	200	1.7	50	30	0.05
MUR3060B	TO-247AD	30	600	300	2.3	10	30	0.035
MUR3060F	ITO-220AC	30	600	200	1.7	50	30	0.05
MUR3060PT	TO-247	30	600	180	1.55	10	15	0.04
MURS3060	TO-220AC	30	600	200	1.7	50	30	0.05
MUR3070	TO-220AC	30	700	200	2.2	10	30	0.035
MUR30120B	TO-247AD	30	1200	300	2.4	10	30	0.075
MUR30120PT	TO-247	30	1200	150	2.9	10	15	0.05
MUR6040PT	TO-247	60	400	480	1.4	10	30	0.05
MUR6060B	TO-247AD	60	600	500	1.7	15	60	0.075
MUR6060PT	TO-247	60	600	300	1.55	10	30	0.05
MUR60120B	TO-247AD	60	1200	500	3.3	15	60	0.085

Small Signal Schottky Diodes

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
SD101AW/BW/CW	SOD-123	0.015	40~60	2	0.39~0.41	0.2	0.001	30~50	-
SD101AWS/BWS/CWS	SOD-323	0.015	40~60	2	0.39~0.41	0.2	0.001	30~50	-
BAS70/-04/-05/-06	SOT-23	0.07	70	0.1	1	0.01	0.015	50	-
BAS70T/-04T/-05T/-06T	SOT-523	0.07	70	0.1	1	0.1	0.015	50	-
BAS70TW/DW-04/DW-05/DW-06/BRW	SOT-363	0.07	70	0.1	1	0.1	0.015	50	-
BAS70WT/-04/-05/-06	SOT-323	0.07	70	-	1	0.1	0.015	50	-
BAS70WX	SOD-323	0.07	70	0.1	1	0.1	0.015	50	-
BAS70X	SOD-523	0.07	70	100	1	0.1	0.015	50	-
SD107WS	SOD-323	0.1	30	0.75	0.55	1	0.05	25	-
BAT54A/C/S	SOT-23	0.2	30	0.6	0.4	2	0.01	25	-
BAT54TW/CDW/ADW/SDW/BRW	SOT-363	0.2	30	0.6	1	2	0.1	25	-
BAT54CM	SOT-723	0.2	30	0.6	1	2	0.1	25	-
BAT54DW	SOT-363	0.2	30	0.6	1	0.2	0.1	25	-
BAT54M	SOT-723	0.2	30	0.6	0.4	2	0.01	25	-
BAT54T/AT/CT/ST	SOT-523	0.2	30	0.6	1	2	0.1	25	-
BAT54V	SOT-563	0.2	30	-	1	2	0.04	25	-
BAT54W	SOD-123	0.2	30	0.6	1	2	0.1	25	-
BAT54WS	SOD-323	0.2	30	0.6	1	2	0.1	25	-
BAT54WT/SWT/AWT/CWT	SOT-323	0.2	30	0.6	0.8	2	0.1	25	-
BAT54WX	SOD-523	0.2	30	0.6	0.8	2	0.1	25	-
BAS40/-04/-05/-06	SOT-23	0.2	40	0.6	1	0.01	0.04	30	-
BAS40T/-04T/-05T/-06T	SOT-523	0.2	40	-	1	0.2	0.04	30	-
BAS40TW/DW-04/DW-05/DW-06/BRW	SOT-363	0.2	40	-	1	0.2	0.04	30	-
BAS40V	SOT-563	0.2	40	-	1	0.2	0.04	30	-
BAS40WT/-04/-05/-06	SOT-323	0.2	40	-	1	1	0.04	30	-
BAS40WX	SOD-323	0.2	40	0.6	1	0.2	0.04	30	-
BAS40X	SOD-523	0.2	40	0.6	1	0.2	0.04	30	-
BAT64-04/-05/-06	SOT-23	0.25	40	0.8	0.43	2	0.01	25	-
BAT64-04W/-05W/-06W	SOT-323	0.25	40	0.8	0.52	2	0.03	30	-
SD103AX	SOD-523	0.35	40	1	0.6	5	0.2	30	-
SD103AW/BW/CW	SOD-123	0.35	20~40	1.5	0.37	5	0.02	10~30	-
SD103AWS/BWS/CWS	SOD-323	0.35	20~40	1.5	0.37	5	0.02	10~30	-
B0530WS	SOD-323	0.5	30	5	0.55	300	0.5	30	-
BAT60B	SOD-323	3	10	5	0.3	15	0.01	5	-

Diodes

Schottky Barrier Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
RB706F-40	SOT-323	0.03	40	0.2	0.37	1	0.001	10	-
RB715F	SOT-323	0.03	40	0.2	0.37	1	0.001	10	-
RB715W	SOT-523	0.03	40	0.2	0.37	1	0.001	10	-
RB717F	SOT-323	0.03	40	0.2	0.37	1	0.001	10	-
RB751G-40	SOD-723	0.03	40	0.2	0.37	0.5	0.001	30	-
RB751S-40	SOD-523	0.03	40	0.5	0.37	0.5	0.001	30	-
RB751S-40DP	0201	0.03	40	0.2	0.37	0.5	0.001	30	-
RB751S-40L2	DFN1006-2L	0.03	40	0.15	0.37	0.5	0.001	30	-
RB751V-40	SOD-323	0.03	40	0.2	0.37	0.5	0.001	30	-
BAS70L2	DFN1006-2L	0.07	70	0.1	0.41	0.2	0.001	50	-
RB520CS-30	SOD-923	0.1	30	0.5	0.45	0.5	0.01	10	-
RB520G-30	SOD-723	0.1	30	0.5	0.45	0.5	0.01	10	-
RB520S-30DP	0201	0.1	30	0.5	0.56	20	0.1	30	-
RB520S-30L2	DFN1006-2L	0.1	30	0.5	0.45	0.5	0.01	10	-
RB521CS-30	SOD-923	0.1	30	0.5	0.35	50	0.01	30	-
RB521G-30	SOD-723	0.1	30	1	0.35	10	0.01	10	-
RB521S-30DP	0201	0.1	30	0.5	0.53	50	0.1	30	-
RB521S-30L2	DFN1006-2L	0.1	30	1	0.35	10	0.01	10	-
1SS294	SOT-23	0.1	40	0.3	0.54	5	0.1	40	-
RB420DS	SOT-23	0.1	40	1	0.45	1	0.01	10	-
RB421DS	SOT-23	0.1	40	1	0.55	30	0.1	10	-
RB425DS	SOT-23	0.1	40	1	0.55	30	0.1	10	-
RB480KS	SOT-353	0.1	40	1	0.45	1	0.01	10	-
RB500V-40	SOD-323	0.1	40	1	0.45	1	0.01	10	-
RB501V-40	SOD-323	0.1	40	1	0.34	30	0.01	10	-
BAT46W	SOD-123	0.15	100		1	5	0.25	75	-
BAT46WS	SOD-323	0.15	100	0.75	1	0.5	0.25	10	-
BAR43/A/C/S	SOT-23	0.2	30		0.33	0.5	0.002	25	-
BAT42W/43W	SOD-123	0.2	30	4	1	0.5	0.2	25	-
BAT42WS/43WS	SOD-323	0.2	30	4	1	0.5	0.2	25	-
BAT43X	SOD-523	0.2	30	4	1	0.5	0.2	25	-
BAT54L2	DFN1006-2L	0.2	30	0.6	0.5	2	0.03	25	-
MMBD301	SOT-23	0.2	30	-	0.52	0.2	0.01	25	-
RB520S-30	SOD-523	0.2	30	1	0.6	1	0.2	10	-
RB521S-30	SOD-523	0.2	30	1	0.5	30	0.2	10	-
BAS40L2	DFN1006-2L	0.2	40	0.6	0.38	0.2	0.001	30	-
RB520S-40	SOD-523	0.2	40	1	0.55	1	0.1	10	-
RB521S-40	SOD-523	0.2	40	1	0.54	90	0.2	40	-
SD103ATW	SOT-363	0.35	40	1	0.37	5	0.02	30	-
RB495DS	SOT-23	0.4	40	2	0.5	70	0.2	25	-
B0520WTL	SOD-523	0.5	20	5.5	0.385	250	0.5	20	-
MBRX0520L	SOD-323	0.5	20	5.5	0.39	250	0.5	20	-
RB411DS	SOT-23	0.5	20	3	0.5	30	0.5	10	-
RB551V-30	SOD-323	0.5	30	2	0.47	100	0.5	20	-

Schottky Barrier Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
B0540W	SOD-123	0.5	40	5.5	0.55	80	0.5	40	-
B0540WS	SOD-323	0.5	40	5	0.55	80	0.5	40	-
BAT720	SOT-23	0.5	40	2	0.55	100	0.5	35	-
BAT720WT	SOT-323	0.5	40	2	0.55	100	0.5	35	-
RB400DS	SOT-23	0.5	40	3	0.55	50	0.5	30	-
RB551V-40	SOD-323	0.5	40	2	0.47	100	0.5	40	-
B0560WS	SOD-323	0.5	60	5	0.7	100	0.5	60	-
MBR0520L~MBR0540L	SOD-123	0.5	20~40	5.5	0.385~0.51	20~250	0.5	20~40	Yes
MBR0520~MBR0580	SOD-123	0.5	20~80	5.5	0.45~0.8	100	0.5	20~80	-
RB461F	SOT-323	0.7	20		0.49	200	0.7	20	-
BAT750	SOT-23	0.75	40	5.5	0.45	60	0.75	30	-
B5817X2	SOD-523	1	20	4	0.6	30	1	20	-
MBRX120LF	SOD-123	1	20	12	0.2	260	0.1	5	Yes
RB491DS	SOT-23	1	20	3	0.45	200	1	20	-
B5818LWS	SOD-323	1	30	10	0.45	200	1	30	Yes
B5819WSL	SOD-323FL	1	40	10	0.6	50	1	40	-
SM5819L2	DFN1006-2	1	40	10	0.6	60	1	40	-
SM5819PE	SOD-323HE	1	40	30	0.55	100	1	40	-
BSR106WS	SOD-323	1	60	10	0.7	100	1	60	-
SSL16PL	SOD-123FL	1	60	30	0.45	65	1	60	Yes
SK1150-L	SMB	1	150	30	0.9	50	1	150	-
SR1150	DO-41	1	150	40	0.87	10	1	150	-
SS1150FL	DO-221AC	1	150	30	0.9	10	1	150	-
SS1150-L	SMA	1	150	30	0.9	50	1	150	-
SK1200-L	SMB	1	200	30	0.92	50	1	200	-
SR1200	DO-41	1	200	30	0.9	10	1	200	-
SS1200FL	DO-221AC	1	200	30	0.92	10	1	200	-
SS1200-L	SMA	1	200	30	0.92	50	1	200	-
SMD110PL~SMD1200PL	SOD-123FL	1	100~200	30	0.85~0.95	10	1	100~200	-
SK12-L~SK110-L	SMB	1	20~100	30	0.5~0.85	100	1	20~100	-
SS12E~SS110E	SMAE	1	20~100	30	0.6~0.85	100	1	20~100	-
SS12FL~SS110FL	DO-221AC	1	20~100	30	0.5~0.85	100	1	20~100	-
SS12-L~SS110-L	SMA	1	20~100	30	0.5~0.85	50~100	1	20~100	-
1N5817~1N5819	DO-41	1	20~40	25	0.45~0.6	100	1	20~40	-
B5817W/18W/19W	SOD-123	1	20~40	10	0.45~0.6	40~200	1	20~40	-
B5817WS/18WS/19WS	SOD-323	1	20~40	10	0.45~0.6	40~200	1	20~40	-
SM5817PL~SM5819PL	SOD-123FL	1	20~40	30	0.45~0.53	50	1	20~40	-
SR102~SR104	DO-41	1	20~40	25	0.45~0.6	100	1	20~40	-
SL14A~SL110A	SMA	1	40~100	28	0.4~0.6	100	1	40~100	Yes
SL14PL~SL110PL	SOD-123FL	1	40~100	28	0.4~0.6	100	1	40~100	Yes
SR105~SR1010	DO-41	1	50~100	30	0.7~0.85	50~100	1	50~100	-
SMD15PL~SMD18PL	SOD-123FL	1	50~80	30	0.7~0.85	100	1	50~80	-
SL22PL	SOD-123FL	2	20	40	0.42	100	2	20	Yes
SMD22WS	SOD-323	2	20	9	0.45	80	1	10	-

Diodes

Schottky Barrier Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
SK225L	SMA	2	25	50	0.55	500	2	25	-
SL24UPL	SOD-123FL	2	40	80	0.42	100	2	40	Yes
SK210H-L	SMB	2	100	50	0.85	5	2	100	-
SMD210HPL	SOD-123FL	2	100	50	0.85	5	2	100	-
SS210H-L	SMA	2	100	50	0.85	5	2	100	-
SB2150	DO-15	2	150	50	0.95	10	2	150	-
SMD2150PL	SOD-123FL	2	150	50	0.9	10	2	150	-
SB2200	DO-15	2	200	50	0.9	10	2	200	-
SMD220PL	SOD-123FL	2	200	50	0.9	10	2	200	-
SS220FL	DO-221AC	2	200	45	0.9	2	2	200	-
SB220L~SB2010L	DO-15	2	20~100	35	0.45~0.7	100	2	20~100	Yes
SB220~SB2010	DO-15	2	20~100	50	0.5~0.85	10~100	2	20~100	-
SMD22PL~SMD210PL	SOD-123FL	2	20~100	50	0.5~0.85	100	2	20~100	-
SS22FL~SS210FL	DO-221AC	2	20~100	50	0.55~0.85	100	2	20~100	-
SR202~SR2150	DO-41	2	20~150	50	0.55~0.95	10~100	2	20~150	-
SK22-L~SK220-L	SMB	2	20~200	50	0.5~0.9	10~100	2	20~200	-
SS22-L~SS220-L	SMA	2	20~200	50	0.55~0.9	100	2	20~200	-
SL24A~SL210A	SMA	2	40~100	50	0.47~0.75	100	2	40~100	Yes
SL24B~SL210B	SMB	2	40~100	50	0.47~0.75	100	2	40~100	Yes
SL24FL~SL210FL	DO-221AC	2	40~100	50	0.47~0.72	100~500	2	40~100	Yes
SL24PL~SL210PL	SOD-123FL	2	40~100	50	0.47~0.72	100	2	40~100	Yes
SK34AL-TPS02	SMA	3	40	90	0.43	100	3	40	Yes
SL345A	SMA	3	45	60	0.45	100	3	45	Yes
SK36BH-L	SMB	3	60	100	0.75	100	3	60	-
MBR3100LPS	TO-277B	3	100	90	0.57	100	3	100	-
SK310BH-L	SMB	3	100	100	0.85	5	3	100	-
SK310H	SMC	3	100	100	0.78	10	3	100	-
SS310HT	SOD-123HT	3	100	50	0.85	100	3	100	-
SK3150	SMC	3	150	80	0.9	10	3	150	-
SK3150A-L	SMA	3	150	80	0.9	10	3	150	-
SK3150BH-L	SMB	3	150	100	0.86	5	3	150	-
SK3150B-L	SMB	3	150	80	0.86	10	3	150	-
MBR3U200	TO-277	3	200	240	0.85	50	3	200	-
SK3200	SMC	3	200	100	0.86	10	3	200	-
SK3200AFL	DO-221AC	3	200	80	0.86	10	3	200	-
SK3200A-L	SMA	3	200	80	0.86	10	3	200	-
SK3200BH	SMB	3	200	100	0.86	2	3	200	-
SK3200B-L	SMB	3	200	100	0.86	2	3	200	-
SK3200H	SMC	3	200	100	0.86	2	3	200	-
SL3200A	SMA	3	200	100	0.8	5	3	200	Yes
SK32AFL~SK310AFL	DO-221AC	3	20~100	80	0.5~0.85	100	3	20~100	-
SK32A-L~SK310A-L	SMA	3	20~100	80	0.5~0.85	100	3	20~100	-
SK32B-L~SK310B-L	SMB	3	20~100	80	0.5~0.85	100	3	20~100	-
SK32~SK310	SMC	3	20~100	80	0.5~0.85	100	3	20~100	-

Schottky Barrier Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
SMD32PL~SMD310PL	SOD-123FL	3	20~100	80	0.5~0.85	100	3	20~100	-
SR302~SR345	DO-201AD	3	20~200	80	0.5~0.9	10~100	3	20	-
1N5820~1N5822	DO-201AD	3	20~40	80	0.475~0.525	100	3	20~40	-
SMD33LHE1~SMD36LHE1	SOD-123HE1	3	30~60	80	0.42~0.48	120~150	3	30~60	Yes
SL34AFL~SL310AFL	DO-221AC	3	40~100	60	0.45~0.6	100	3	40~100	Yes
SL34A~SL310A	SMA	3	40~100	60	0.45~0.6	100	3	40~100	Yes
SL34B~SL310B	SMB	3	40~100	60	0.45~0.6	100	3	40~100	Yes
SL34PL~SL310PL	SOD-123FL	3	40~100	60	0.45~0.6	100	3	40~100	Yes
SK4200L	SMC	4	200	100	0.86	10	4	200	-
SK42BL~SK44BL	SMB	4	20~40	100	0.45	100	4	20~40	Yes
SK42L~SK44L	SMC	4	20~40	150	0.45	100	4	20~40	-
MBR545	TO-220AC	5	45	150	0.6	10	5	45	-
MBR545F	ITO-220AC	5	45	80	0.55	100	5	45	-
MBR5U60	TO-277	5	60	150	0.55	100	5	60	-
SR506HL	DO-201AD	5	60	220	0.62	100	5	60	-
SR506L	DO-201AD	5	60	120	0.49	100	5	60	Yes
MBR510LPS	TO-277B	5	100	200	0.72	100	5	100	-
MBRD5100	DPAK	5	100	80	0.72	3	5	100	-
MBRD5100C	DPAK	5	100	140	0.76	10	5	100	-
MBRD5100HL	DPAK	5	100	100	0.73	3.5	5	100	-
SK510BH-L	SMB	5	100	100	0.85	5	5	100	-
SR5010H	DO-201AD	5	100	150	0.8	20	5	100	-
SR5010HL	DO-201AD	5	100	200	0.78	20	5	100	-
SR5010L	DO-201AD	5	100	80	0.7	100	5	100	Yes
SK5150A-L	SMA	5	150	100	0.9	10	5	150	-
SK5150BH	SMB	5	150	100	0.87	10	5	150	-
SK5150L	SMC	5	150	150	0.87	10	5	150	-
SR5150H	DO-201AD	5	150	150	0.85	0.5	5	150	-
MBR5200HL	TO-220AC	5	200	150	0.85	10	5	200	-
MBRD5200	DPAK	5	200	130	0.86	5	5	200	-
MBRD5200CT	DPAK	5	200	140	0.84	5	2.5	200	-
SK5200A-L	SMA	5	200	100	0.9	10	5	200	-
SK520BH	SMB	5	200	100	0.9	10	5	200	-
SK5200L	SMC	5	200	150	0.9	10	5	200	-
SR5200H	DO-201AD	5	200	150	0.9	0.5	5	200	-
SK52A-L~SK510A-L	SMA	5	20~100	100	0.55~0.85	100	5	20~100	-
SK52L~SK510L	SMC	5	20~100	100	0.55~0.85	100	5	20~100	-
SK52AFL~SK5200AFL	DO-221AC	5	20~200	100	0.55~0.9	10~100	5	20~200	-
SK52B-L~SK520B-L	SMB	5	20~200	100	0.55~0.9	50~100	5	20~200	-
SR502~SR5200	DO-201AD	5	20~200	150	0.55~0.92	10~100	5	20~200	-
SL54AFL~SL510AFL	DO-221AC	5	40~100	100	0.45~0.7	100	5	40~100	Yes
SL54B~SL510B	SMB	5	40~100	100	0.45~0.65	100	5	40~100	Yes
SL54~SL510	SMC	5	40~100	100	0.45~0.7	100	5	40~100	Yes
MBRD640CT	DPAK	6	40	78	0.54	100	3	40	-

Diodes

Schottky Barrier Rectifiers

Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
MBRD660CT	DPAK	6	60	80	0.74	50	3	60	-
MBRD6100CT	DPAK	6	100	78	0.74	10	3	100	-
SK62L~SK610L	SMC	6	20~100	150	0.65~0.85	100	6	20~100	-
MBR720~MBR760	TO-220AC	7.5	20~60	150	0.75~0.84	50~100	7.5~15	20~60	-
MBRD845C	DPAK	8	45	150	0.51	100	8	45	-
MBR860ULPS	TO-277B	8	60	275	0.43	600	8	60	Yes
MBRB820~MBRB8100	D2-PAK	8	20~100	150	0.55~0.85	100	8	20~100	-
SD820~SD8100	DO-201AD	8	20~100	175	0.62~0.85	100	8	20~100	-
SK82L~SK810L	SMC	8	20~100	200	0.65~0.8	100	8	20~100	-
SR802~SR810	DO-201AD	8	20~100	150	0.65~0.85	100	8	20~100	-
MBR870~MBR8100	TO-220AC	8	70~100	125	0.85	100	8	70~100	-
SBLB1040	D2-PAK	10	40	250	0.6	100	10	40	Yes
MBR1045LPS	TO-277B	10	45	275	0.47	500	10	45	Yes
MBR1045ULPS	TO-277B	10	45	275	0.47	250	10	45	Yes
MBR10U45L	TO-277	10	45	275	0.47	500	10	50	Yes
MBRD1045C	DPAK	10	45	150	0.51	100	10	45	-
SK1045-L	SMC	10	45	250	0.55	200	10	45	-
SR1045	R-6	10	45	275	0.55	100	10	45	-
MBR10U60	TO-277	10	60	275	0.5	500	10	50	-
MBRL1060CT	TO-220AB	10	60	100	0.6	100	5	60	Yes
MBRL1060CTA	TO-220AB	10	60	150	0.52	100	5	60	Yes
MBRL1060FCT	ITO-220AB	10	60	100	0.6	100	5	60	Yes
MBR10100ULPS	TO-277B	10	100	200	0.7	500	10	100	Yes
MBRB10100CT	D2-PAK	10	100	150	0.85	10	5	100	-
MBRD10100	DPAK	10	100	180	0.73	50	10	100	-
MBRD10100CTS	DPAK	10	100	100	0.83	10	5	100	-
SK1010H-L	SMC	10	100	150	0.82	10	10	100	-
MBR10150	TO-220AC	10	150	150	0.9	100	10	150	-
MBR10150CT	TO-220AB	10	150	120	0.92	10	5	150	-
MBR10150FCT	ITO-220AB	10	150	120	0.92	10	5	150	-
MBR10150ULPS	TO-277B	10	150	180	0.84	20	10	150	Yes
MBRB10150CT	D2-PAK	10	150	120	0.92	10	5	150	-
MBR10200CT	TO-220AB	10	200	150	0.95	10	10	200	-
MBR10200FCT	ITO-220AB	10	200	125	0.92	100	5	200	-
MBR10200UPS	TO-277B	10	200	180	0.88	100	10	200	Yes
MBRB10200CT	D2-PAK	10	200	150	0.9	10	5	200	-
MBRB10200CTS	D2-PAK	10	200	120	0.93	10	5	200	-
MBRL10100FCT~MBRL10150FCT	ITO-220AB	10	100~150	120	0.72~0.9	100	5	100~150	Yes
MBRL10100CT~MBRL10150CT	TO-220AB	10	100~150	120	0.72~0.85	100	5	100~150	Yes
MBR10100CTH~MBR10200CTH	TO-220AB	10	100~200	120	0.8~0.9	10	5	100~200	-
MBR10100FCTH~MBR10200FCTH	ITO-220AB	10	100~200	120	0.8~0.9	10	5	100~200	-
MBRD10100CTH~MBRD10200CTH	DPAK	10	100~200	120	0.8~0.9	10	5	100~200	-
MBRD10150CT~MBRD10200CT	DPAK	10	150~200	100	0.92	10	5	150~200	-
MBR1020FCT~MBR10100FCT	ITO-220AB	10	20~100	120	0.7~0.85	100	5	20~100	-

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Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
MBR1020F~MBR10100F	ITO-220AC	10	20~100	150	0.55~0.85	100	10	20~100	-
MBR1020~MBR10100	TO-220AC	10	20~100	150	0.65~0.84	100	10	20~100	-
MBRD1020CT~MBRD10100CT	DPAK	10	20~100	150	0.65~0.85	10	5	20~100	-
MBRB1020~MBRB10200	D2-PAK	10	20~200	150	0.6~0.95	100	10	20~200	-
MBR1020CT~MBR1060CT	TO-220AB	10	20~60	125	0.7~0.8	100	5	20~60	-
MBRB1030CT~MBRB1060CT	D2-PAK	10	30~60	125	0.55	100	5	30~60	-
MBRL1045CT~MBRL1050CT	TO-220AB	10	45~50	120	0.52	200	5	45~50	Yes
MBRB1060CTH~MBRB10200CTH	D2-PAK	10	60~200	150	0.72~0.9	50	5	60~200	-
MBR1080CT~MBR10100CT	TO-220AB	10	80~100	120	0.85	100	5	80~100	-
SB1245	DO-201AD	12	45	180	0.55	100	12	45	-
MBR12100LPS	TO-277B	12	100	250	0.8	250	12	100	-
MBR12U100L	TO-277	12	100	180	0.6	500	12	100	Yes
MBR12120LPS	TO-277B	12	120	200	0.8	70	12	120	-
MBR12150LPS	TO-277B	12	150	200	0.82	30	12	150	-
SB1220~SB12100	DO-201AD	12	20~100	250	0.55~0.85	500	12	20~100	-
MBRD1220CT~MBRD1245CT	DPAK	12	20~45	150	0.47	100	6	20~45	-
MBRD1260CT~MBRD12100CT	DPAK	12	60~100	150	0.7~0.85	50	6	60~100	-
15SQ045	R-6	15	45	275	0.48	100	15	45	-
MBR15U45	TO-277	15	45	275	0.47	500	15	45	-
MBR1550LPS	TO-277B	15	50	260	0.55	500	15	50	-
MBR1550ULPS	TO-277B	15	50	320	0.47	300	15	50	Yes
MBR15U60	TO-277	15	60	300	0.5	500	15	50	-
MBR15100ULPS	TO-277B	15	100	280	0.68	90	15	100	Yes
MBR15U100	TO-277	15	100	275	0.85	100	15	100	-
MBR1520CT~MBR15100CT	TO-220AB	15	20~100	150	0.84~0.95	10~100	15	20~100	-
MBR1520~MBR15100	TO-220AC	15	20~100	150	0.63~0.84	100	15	20~100	-
MBRB1520CT~MBRB15100CT	D2-PAK	15	20~100	150	0.84~0.92	10~100	15	20~100	-
MBRD1520~MBRD15100	DPAK	15	20~100	150	0.63~0.84	100	15	20~100	-
SB1520~SB15100	R-6	15	20~100	300	0.6~0.85	100	15	20~100	-
MBR1520F~MBR1560F	ITO-220AC	15	20~60	150	0.63~0.75	100	15	20~60	-
MBRB1535~MBRB1545	D2-PAK	15	35~45	250	0.52	150	15	35~45	-
MBRL1535~MBRL1545	TO-220AC	15	35~45	250	0.52	150	15	35~45	-
MBR16100CT	TO-220AB	16	100	125	0.85	100	8	100	-
MBR1620FCT~MBR16100FCT	ITO-220AB	16	20~100	150	0.55~0.85	200	8	20~100	-
MBR1620CT~MBR1660CT	TO-220AB	16	20~60	125	0.7~0.8	100	8	20~60	-
MBR1620~MBR1660	TO-220AC	16	20~60	150	0.63~0.75	200~500	16	20~60	-
MBRB1620CT~MBRB1660CT	D2-PAK	16	20~60	150	0.7~0.8	100	8	20~60	-
MBRBL2045C	D2-PAK	20	45	300	0.53	100	20	45	Yes
MBRBL2045CT	D2-PAK	20	45	180	0.55	100	10	45	Yes
MBRL2045CT	TO-220AB	20	45	150	0.52	200	10	45	Yes
MBRL2045FCT	ITO-220AB	20	45	150	0.52	200	10	45	Yes
MBRL20U45CT	TO-220AB	20	45	280	0.45	180	10	45	Yes
MBR20P50	DFN5060-8	20	50	275	0.53	300	20	50	-
MBRLP2050	DFN5060-8L	20	50	280	0.51	300	20	50	Yes

Diodes

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Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
MBRDL2060CT	DPAK	20	60	125	0.57	100	10	60	Yes
MBRL2060CT	TO-220AB	20	60	150	0.6	100	10	60	Yes
MBRL2060FCT	ITO-220AB	20	60	150	0.6	100	10	60	Yes
MBRL20U60CT	TO-220AB	20	60	150	0.56	120	10	60	Yes
MBR20100CTB	TO-220AB	20	100	150	0.95	10	20	100	-
MBR20100FCTS	ITO-220AB	20	100	130	0.91	10	20	100	-
MBR20100ULPS	TO-277B	20	100	300	0.66	80	20	100	Yes
MBRBL20100CT	D2-PAK	20	100	150	0.72	100	10	100	Yes
MBRBL20U100CT	D2-PAK	20	100	250	0.65	100	10	100	Yes
MBRD20100	DPAK	20	100	200	0.76	50	20	100	-
MBRDL20100CT	DPAK	20	100	250	0.72	100	10	100	Yes
MBRL20100CT	TO-220AB	20	100	200	0.7	100	10	100	Yes
MBRL20U100CT	TO-220AB	20	100	250	0.65	100	10	100	Yes
MBRL20U100FCT	ITO-220AB	20	100	250	0.65	100	10	100	Yes
MBRLP20100	DFN5060-8L	20	100	280	0.7	250	20	100	Yes
MBR20150CT	TO-220AB	20	150	150	0.92	10	10	150	-
MBR20150FCT	ITO-220AB	20	150	150	0.92	25	10	150	-
MBR20150PT	TO-247	20	150	135	0.88	10	10	150	-
MBRB20150CT	D2-PAK	20	150	130	0.9	10	10	150	-
MBRBL20150CT	D2-PAK	20	150	160	0.84	10	10	150	Yes
MBRL20150CT	TO-220AB	20	150	200	0.85	10	10	150	Yes
MBR20200CT	TO-220AB	20	200	150	0.95	10	10	200	-
MBR20200CTS	TO-220AB	20	200	150	0.95	10	10	200	-
MBR20200FCT	ITO-220AB	20	200	150	0.95	50	10	200	-
MBR20200PT	TO-247	20	200	250	0.9	10	10	200	-
MBRB20200CT	D2-PAK	20	200	150	0.95	10	10	200	-
MBRBL20200CT	D2-PAK	20	200	150	0.86	10	5	200	Yes
MBRL20200CT	TO-220AB	20	200	160	0.88	10	10	200	Yes
MBRL20200FCT	ITO-220AB	20	200	160	0.88	10	10	200	Yes
MBR20300CT	TO-220AB	20	300	200	0.975	50	10	300	-
MBR20300FCT	ITO-220AB	20	300	200	0.975	50	10	300	-
MBRL20100FCT~MBRL20150FCT	ITO-220AB	20	100~150	200	0.72~0.9	100	10	100~150	Yes
MBR20100CTH~MBR20200CTH	TO-220AB	20	100~200	150	0.82~0.9	10	10	100~200	-
MBR20100FCTH~MBR20200FCTH	ITO-220AB	20	100~200	150	0.82~0.9	10	10	100~200	-
MBRB20100CTH~MBRB20200CTH	D2-PAK	20	100~200	150	0.8~0.9	10	10	100~200	-
MBRD20100CTH~MBRD20200CTH	DPAK	20	100~200	130	0.85~0.9	10	10	100~200	-
MBR2020CT~MBR20100CT	TO-220AB	20	20~100	150	0.84~0.95	100	20	20~100	-
MBR2020FCT~MBR20100FCT	ITO-220AB	20	20~100	150	0.7~0.85	50~100	10	20~100	-
MBRB2020CT~MBRB20100CT	D2-PAK	20	20~100	150	0.84~0.95	100	20	20~100	-
MBR2520CT~MBR2560CT	TO-220AB	25	20~60	150	0.75~0.82	200	15~25	20~60	-
30SQ045	R-6	30	45	275	0.52	100	30	45	-
MBRBL3045CT	D2-PAK	30	45	200	0.53	50	15	45	Yes
MBRL3045CT	TO-220AB	30	45	250	0.52	200	15	45	Yes
MBRL3045FCT	ITO-220AB	30	45	250	0.55	100	15	45	Yes

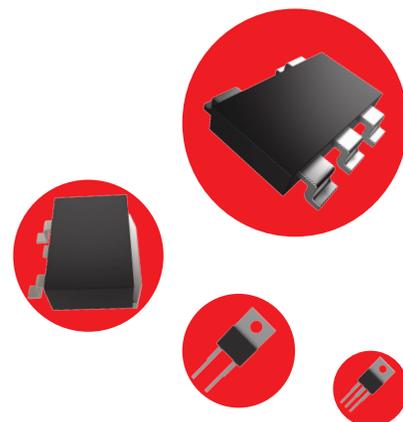
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Part Number	Package	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Low VF
		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
MBRBL3060CT	D2-PAK	30	60	240	0.63	100	15	60	Yes
MBRL3060CT	TO-220AB	30	60	240	0.62	100	15	60	Yes
MBRL3060FCT	ITO-220AB	30	60	200	0.6	100	15	60	Yes
MBR30100CT	TO-220AB	30	100	250	0.85	10	15	100	-
MBR30100PT	TO-247	30	100	300	0.8	50	15	100	-
MBRB30100CT	D2-PAK	30	100	250	0.85	10	15	100	-
MBRBL30100CT	D2-PAK	30	100	200	0.72	100	15	100	Yes
MBRBL30U100CT	D2-PAK	30	100	320	0.64	100	15	100	Yes
MBRJL30100CT	TO-262	30	100	200	0.77	50	15	100	Yes
MBRJL30100CTL	TO-262L	30	100	200	0.77	50	15	100	Yes
MBRL30100CT	TO-220AB	30	100	200	0.72	100	15	100	Yes
MBRL30100FCT	ITO-220AB	30	100	200	0.72	100	15	100	Yes
MBRL30U100CT	TO-220AB	30	100	320	0.64	100	15	100	Yes
MBRL30U100FCT	ITO-220AB	30	100	320	0.64	100	15	100	Yes
ST30100C	TO-220AB	30	100	250	0.91	500	30	100	-
ST30120FC	ITO-220AB	30	120	300	0.95	200	30	120	-
MBR30150CT	TO-220AB	30	150	200	0.9	10	15	150	-
MBR30150FCT	ITO-220AB	30	150	260	0.9	5	15	150	-
MBR30150PT	TO-247	30	150	275	0.87	10	15	150	-
MBRB30150CT	D2-PAK	30	150	200	0.9	20	15	150	-
MBRBL30150CT	D2-PAK	30	150	220	0.84	10	15	150	Yes
MBRJL30150CT	TO-262	30	150	200	0.9	10	15	150	-
MBRJL30150CTL	TO-262L	30	150	200	0.9	10	15	150	-
MBRL30150CT	TO-220AB	30	150	220	0.84	10	15	150	Yes
MBRL30150FCT	ITO-220AB	30	150	220	0.84	10	15	150	Yes
MBR30200CT	TO-220AB	30	200	200	0.95	100	15	200	-
MBR30200CTH	TO-220AB	30	200	250	1	10	30	200	-
MBR30200FCT	ITO-220AB	30	200	200	1.05	100	30	200	-
MBR30200PT	TO-247	30	200	275	0.9	10	15	200	-
MBR30300CTH	TO-220AB	30	300	250	1.3	10	15	300	-
MBRL30300CT	TO-220AB	30	300	110	1.1	10	15	300	Yes
MBR30100CTH~MBR30150CTH	TO-220AB	30	100~150	250	0.85	10	15	100~150	-
MBR30100FCTH~MBR30150FCTH	ITO-220AB	30	100~150	250	0.85	10	15	100~150	-
MBRB30100CTH~MBRB30200CTH	D2-PAK	30	100~200	250	0.8~0.9	10	15	100~200	-
MBR3020FCT~MBR30100FCT	ITO-220AB	30	20~100	250	0.6~0.85	100	15	20~100	-
MBRB2520CT~MBRB2560CT	D2-PAK	30	20~60	150	0.75~0.82	200	15~30	20~60	-
MBR3030CT~MBR3060CT	TO-220AB	30	30~60	200	0.84~0.95	100	30	30~60	-
MBRB3030CT~MBRB3060CT	D2-PAK	30	30~60	250	0.55~0.72	100	15	30~60	-
MBR2535FCT~MBR2560FCT	ITO-220AB	30	35~60	150	0.75~0.82	100~200	12.5~25	35~60	-
MBR4045PT	TO-247	40	45	250	0.61	100	20	45	-
MBR4060PT	TO-247	40	60	400	0.72	200	20	60	-
MBRL40U60CT	TO-220AB	40	60	300	0.56	200	20	60	Yes
MBR40100CTH	TO-220AB	40	100	250	0.85	10	20	100	-
MBR40100PT	TO-247	40	100	400	0.8	50	20	100	-

Diodes

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		I_F (A)	V_{RWM} (V)	I_{FSM} (A)	V_F (V)	I_R (uA)	I_{FM} (A)	V_R (V)	
MBRL40U100CT	TO-220AB	40	100	300	0.71	100	20	100	Yes
ST40100CT	TO-220AB	40	100	250	0.73	1000	20	100	Yes
STU40100CT	TO-220AB	40	100	300	0.71	200	20	100	Yes
MBRBL40120CT	D2-PAK	40	120	300	0.82	100	20	120	Yes
ST40120CT	TO-220AB	40	120	250	0.85	200	20	120	Yes
MBR40200CT	TO-220AB	40	200	450	0.9	10	20	200	-
MBR40200PT	TO-247	40	200	250	0.91	50	20	200	-
MBRB40200CT	D2-PAK	40	200	450	0.9	10	20	200	-
MBR40300CTH	TO-220AB	40	300	430	1.3	10	20	300	-
MBRL40300CT	TO-220AB	40	300	200	0.95	10	20	300	Yes
MBR60150PT	TO-247	60	150	400	0.9	10	30	150	-
MBR60200CT	TO-220AB	60	200	450	0.9	20	30	200	-
MBR60200PT	TO-247	60	200	450	0.9	20	30	200	-



Switching Diodes

Part Number	Package	Power Dissipation	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Reverse Recovery Time	Internal structure
		P _D (mW)	I _{F(AV)} (A)	V _{RWM} (V)	I _{FSM} (A)	V _F (V)	I _R (uA)	I _{FM} (A)	V _R (V)	T _{RR} (μs)	
1N4148WL2	DFN1006-2L	100	0.15	100	4	1	5	0.05	75	0.004	Fig.7
1N4448X	SOD-523	150	0.25	75	2	1	2.5	0.1	75	0.004	Fig.7
1SS181	SOT-23	150	0.1	80	2	1.2	0.5	0.1	80	0.004	Fig.4
1SS184	SOT-23	150	0.1	80	0.3	1.2	0.5	0.1	80	0.004	Fig.5
1SS187	SOT-23	150	0.1	80	2	0.92	0.5	0.1	80	0.004	Fig.2
1SS193	SOT-23	150	0.1	80	-	1.2	0.5	0.1	80	0.004	Fig.1
1SS196	SOT-23	150	0.1	80	-	1.2	0.5	0.1	80	0.004	Fig.1
1SS226	SOT-23	150	0.1	80	0.3	0.715	0.5	0.001	80	0.004	Fig.6
1SS387	SOD-523	150	0.1	85	1	0.62	0.1	0.001	30	0.004	Fig.7
1SS388	SOD-523	150	0.1	45	1	0.36	5	0.01	10	-	Fig.7
1SS400	SOD-523	150	0.1	90	0.5	1.2	5	0.1	80	0.004	Fig.7
BAS16T	SOT-523	150	0.075	85	4	1	2	0.05	75	0.004	Fig.1
BAV99T	SOT-523	150	0.075	85	4	1	2	0.05	75	0.004	Fig.6
BAV70T	SOT-523	150	0.075	85	4	1	2	0.05	75	0.004	Fig.5
BAW56T	SOT-523	150	0.075	85	4	1	2	0.05	75	0.004	Fig.4
BAS16V	SOT-563	150	0.2	75	-	1	1	0.05	75	0.004	Fig.8
BAS16X	SOD-523	150	0.2	75	0.5	1	1	0.05	75	0.006	Fig.7
BAS21T	SOT-523	150	0.2	250	2.5	1	0.1	0.1	250	0.05	Fig.1
BAS21X	SOD-523	150	0.2	250	2.5	1.25	0.1	0.2	200	0.05	Fig.7
BAS516	SOD-523	150	0.25	100	0.5	0.715	0.03	0.001	25	0.004	Fig.7
BAV3004X	SOD-523	150	0.225	300	4	1.25	0.1	0.2	240	0.05	Fig.7
BAV70M	SOT-723	150	0.2	75	2	1.25	2.5	0.15	75	0.004	Fig.5
MMBD4448HT	SOT-523	150	0.25	100	2	0.72	0.025	0.005	20	0.004	Fig.1
MMBD4448HTA	SOT-523	150	0.25	100	2	0.72	0.025	0.005	20	0.004	Fig.4
MMBD4448HTC	SOT-523	150	0.25	100	2	0.72	0.025	0.005	20	0.004	Fig.5
MMBD4448HTS	SOT-523	150	0.25	100	2	0.72	0.025	0.005	20	0.004	Fig.6
MMBD4448V	SOT-563	150	0.25	80	4	1	0.1	0.1	70	0.004	Fig.8
1N4148WX	SOD-323	200	0.15	100	2	1	1	0.05	75	0.004	Fig.7
1N4148WXL	SOD-323FL	200	0.15	100	2	1	1	0.05	75	0.004	Fig.7
1N4148X	SOD-523	200	0.15	100	2	1.25	1	0.15	75	0.004	Fig.7
1N4448WX	SOD-323	200	0.25	75	2	1	2.5	0.1	75	0.004	Fig.7
1SS357	SOD-323	200	0.1	45	1	0.36	5	0.01	40	-	Fig.7
1SS404	SOD-323	200	0.3	25	0.7	0.16	50	0.001	20	-	Fig.7
MMBD4148TW	SOT-363	200	0.15	75	-	1	1	0.05	75	0.004	Fig.9
BAS16TW	SOT-363	200	0.15	75	-	1	1	0.05	75	0.004	Fig.9
MMBD4148WT	SOT-323	200	0.15	75	2	1	1	0.05	75	0.004	Fig.1
BAS16WT	SOT-323	200	0.15	75	2	1	1	0.05	75	0.004	Fig.1
BAS21WT	SOT-323	200	0.2	200	-	1	0.1	0.1	200	0.05	Fig.1
BAS20WT	SOT-323	200	0.2	150	-	1	0.1	0.1	150	0.05	Fig.1
BAS19WT	SOT-323	200	0.2	100	-	1	0.1	0.1	100	0.05	Fig.1
BAS21WS	SOD-323	200	0.2	250	0.625	1.25	0.1	0.2	200	0.05	Fig.7
BAV199DW	SOT-363	200	0.16	85	-	1	0.005	0.01	75	3	Fig.12
BAV199WT	SOT-323	200	0.16	85	4	1	0.005	0.01	75	3	Fig.6
BAV3004WS	SOD-323	200	0.225	350	4	1.25	0.1	0.2	240	0.05	Fig.7

Diodes

Switching Diodes

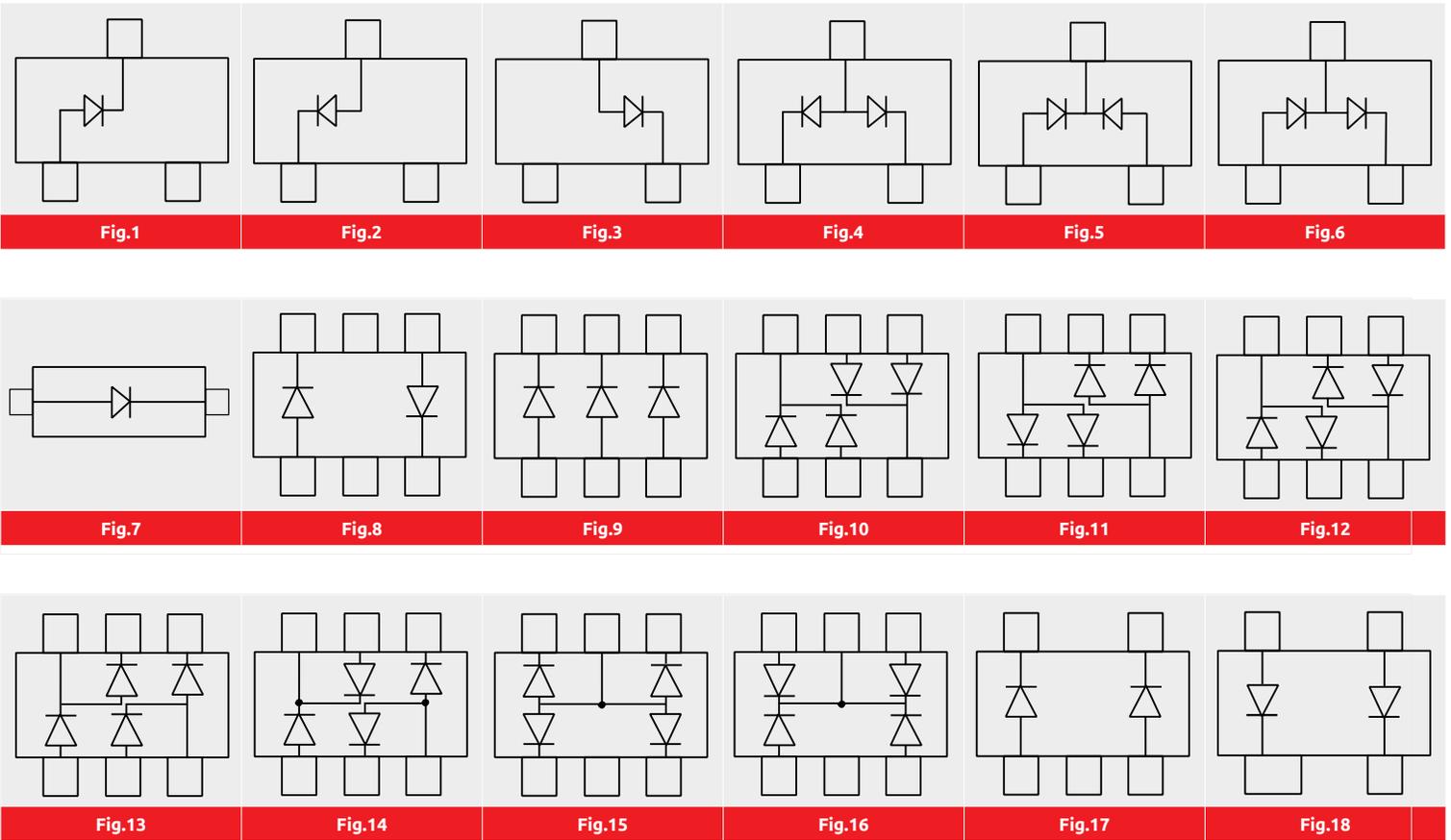
Part Number	Package	Power Dissipation	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Reverse Recovery Time	Internal structure
		P_D (mW)	$I_{F(AV)}$ (A)	V_{RWM} (V)	I_{FSM} (A)	V_f (V)	I_R (uA)	I_{FM} (A)	V_R (V)	T_{RR} (μs)	
BAV70DW	SOT-363	200	0.3	75	2	1	2.5	0.05	75	0.004	Fig.10
BAV70WT	SOT-323	200	0.15	75	2	1	2.5	0.05	75	0.004	Fig.5
BAV756DW	SOT-363	200	0.15	75	2	1.25	2.5	0.15	75	0.004	Fig.14
BAV99BRW	SOT-363	200	0.15	75	1	0.855	2.5	0.01	75	0.004	Fig.13
BAV99DW	SOT-363	200	0.15	75	2	0.855	2.5	0.01	75	0.004	Fig.12
BAV99WT	SOT-323	200	0.15	100	2	1	2.5	0.05	75	0.004	Fig.6
BAW56DW	SOT-363	200	0.15	75	2	1	2.5	0.05	75	0.004	Fig.11
BAW56WT	SOT-323	200	0.15	75	2	1	2.5	0.05	75	0.004	Fig.4
DA204U	SOT-323	200	0.1	20	-	1	0.1	0.01	15	-	Fig.6
DA227	SOT-353	200	0.3	80	2	1.2	0.1	0.1	70	0.004	Fig.17
DAN202	SOT-23	200	0.1	80	0.3	1.2	0.1	0.1	70	0.004	Fig.5
DAN202L	SOT-23-3L	200	0.1	80	4	1.2	0.1	0.1	70	0.004	Fig.5
DAN202U	SOT-323	200	0.1	80	0.3	1.2	0.1	0.1	70	0.004	Fig.5
DAN217	SOT-23	200	0.3	80	1	1.2	0.1	0.1	70	0.004	Fig.6
DAN217U	SOT-323	200	0.3	80	1	1.2	0.2	0.1	70	0.004	Fig.6
DAP202	SOT-23	200	0.1	80	4	1.2	0.1	0.1	70	0.004	Fig.4
DAP202L	SOT-23-3L	200	0.1	80	4	1.2	0.1	0.1	70	0.004	Fig.4
DAP202U	SOT-323	200	0.1	80	0.3	1.2	0.1	0.1	70	0.004	Fig.4
MMBD4448DW	SOT-363	200	0.25	75	4	1	2.5	0.05	75	0.004	Fig.8
MMBD4448HCQW	SOT-363	200	0.25	80	4	1	0.1	0.05	70	0.004	Fig.16
MMBD4448HCDW	SOT-363	200	0.25	80	4	1	0.1	0.05	70	0.004	Fig.10
MMBD4448HSDW	SOT-363	200	0.25	80	4	1	0.1	0.05	70	0.004	Fig.12
MMBD4448HAQW	SOT-363	200	0.25	80	4	1	0.1	0.05	70	0.004	Fig.15
MMBD4448HTW	SOT-363	200	0.25	80	4	1	0.1	0.05	70	0.004	Fig.9
MMBD4448HADW	SOT-363	200	0.25	80	4	1	0.1	0.05	70	0.004	Fig.11
MMBD4448WT	SOT-323	200	0.25	100	2	0.72	0.025	0.005	20	0.004	Fig.1
MMDL914	SOD-323	200	0.2	100	0.5	1	0.025	0.01	20	0.004	Fig.7
BAS116	SOT-23	225	0.2	75	-	1	0.005	0.01	75	3	Fig.1
BAS21A	SOT-23	225	0.2	250	2.5	1.1	1	0.1	200	0.05	Fig.4
BAS21C	SOT-23	225	0.2	250	2.5	1.1	1	0.1	200	0.05	Fig.5
BAS21S	SOT-23	225	0.2	250	2.5	1.1	1	0.1	200	0.05	Fig.6
BAS716	SOD-523	225	0.2	75	1	1	0.005	0.01	75	3	Fig.7
BAV74	SOT-23	225	0.2	50	-	1	0.1	0.1	50	0.004	Fig.5
MMBD7000	SOT-23	225	0.2	100	0.5	0.82	1	0.01	50	0.004	Fig.6
BAS19	SOT-23	250	0.2	120	0.5	1.25	0.1	0.2	120	0.05	Fig.1
BAS21	SOT-23	250	0.2	250	0.5	1.25	0.1	0.2	250	0.05	Fig.1
BAS20	SOT-23	250	0.2	200	0.5	1.25	0.1	0.2	200	0.05	Fig.1
BAS28	SOT-143	250	0.215	85	4	1	1	0.05	75	0.004	Fig.18
BAV170	SOT-23	250	0.215	85	4	0.9	0.005	0.001	75	3	Fig.5
BAV19WS	SOD-323	250	0.2	120	2.5	1.25	0.1	0.2	100	0.05	Fig.7
BAV21WS	SOD-323	250	0.2	250	2.5	1.25	0.1	0.2	200	0.05	Fig.7
BAV20WS	SOD-323	250	0.2	200	2.5	1.25	0.1	0.2	150	0.05	Fig.7
BAV316	SOD-323	250	0.215	130	2	1.1	0.005	0.15	75	3	Fig.7
BAW156	SOT-23	250	0.16	75	-	0.9	0.005	0.001	75	3	Fig.4

Switching Diodes

Part Number	Package	Power Dissipation	Average Forward Current	Working Peak Reverse Voltage	Peak Forward Surge Current	Maximum Forward Voltage	Reverse Voltage Leakage Current	At Rated Forward Current	Maximum DC Blocking Voltage	Reverse Recovery Time	Internal structure
		P _D (mW)	I _{F(AV)} (A)	V _{RWM} (V)	I _{FSM} (A)	V _F (V)	I _R (uA)	I _{FM} (A)	V _R (V)	T _{RR} (μs)	
MMBD2004S	SOT-23	250	0.225	300	1	1	0.1	0.1	240	0.05	Fig.6
MMBD2004SWT	SOT-323	250	0.225	300	1	1	0.1	0.1	240	0.05	Fig.6
BAS116L2B	DFN1006-2L	300	0.215	85	4	1.25	0.005	0.15	75	3	Fig.7
BAL99	SOT-23	350	0.1	70	-	0.715	2.5	0.001	70	0.006	Fig.3
BAS16	SOT-23	350	0.215	100	1	1.25	1	0.1	75	0.004	Fig.1
BAS16W	SOD-123	350	0.1	75	1	1.25	1	0.15	75	0.006	Fig.7
BAS16WX	SOD-323	350	0.1	75	1	1.25	1	0.15	75	0.006	Fig.7
BAS16WXH	SOD-323	350	0.1	100	1	1.25	1	0.15	75	0.006	Fig.7
BAV116W	SOD-123	350	0.215	130	1	1.25	0.005	0.15	75	3	Fig.7
BAV23A	SOT-23	350	0.225	200	9	1.25	0.1	0.2	250	0.05	Fig.4
BAV23C	SOT-23	350	0.225	200	9	1.25	0.1	0.2	250	0.05	Fig.5
BAV23S	SOT-23	350	0.225	200	9	1.25	0.1	0.2	250	0.05	Fig.6
BAV70	SOT-23	350	0.215	100	1	0.855	1	0.01	75	0.004	Fig.5
BAV99	SOT-23	350	0.215	100	1	0.855	2.5	0.01	75	0.004	Fig.6
BAW56	SOT-23	350	0.25	75	1	0.855	2.5	0.01	75	0.004	Fig.4
CMP5H-3	SOT-23	350	0.1	30	-	1	0.5	0.1	25	0.004	Fig.1
CMP5H-3C	SOT-23	350	0.1	30	-	1	0.5	0.1	25	0.004	Fig.5
CMP5H-3A	SOT-23	350	0.1	30	-	1	0.5	0.1	25	0.004	Fig.4
CMP5H-3S	SOT-23	350	0.1	30	-	1	0.5	0.1	25	0.004	Fig.6
MMBD1501	SOT-23	350	0.6	180	1	1.5	5	0.3	180	-	Fig.1
MMBD1503	SOT-23	350	0.6	180	1	1.5	5	0.3	180	-	Fig.6
MMBD1504	SOT-23	350	0.6	180	1	1.5	5	0.3	180	-	Fig.5
MMBD1505	SOT-23	350	0.6	180	1	1.5	5	0.3	180	-	Fig.4
MMBD4148	SOT-23	350	0.2	100	1	0.855	0.025	0.1	20	0.004	Fig.1
MMBD4148CC	SOT-23	350	0.2	100	1	1	0.025	0.05	20	0.004	Fig.5
MMBD4148CA	SOT-23	350	0.2	100	1	1	0.025	0.05	20	0.004	Fig.4
MMBD4148SE	SOT-23	350	0.2	100	1	1	0.025	0.05	20	0.004	Fig.6
MMBD4448	SOT-23	350	0.25	100	2	0.72	0.025	0.005	20	0.004	Fig.1
MMBD914	SOT-23	350	0.15	100	1	0.855	0.025	0.01	20	0.004	Fig.1
1N4148W	SOD-123	400	0.15	100	1	0.715	50	0.001	75	0.004	Fig.7
1N4148WL	SOD-123FL	400	0.15	100	2	1.25	1	0.15	75	0.004	Fig.7
BAS316	SOD-323	400	0.25	100	4	0.715	1	0.001	75	0.004	Fig.7
BAV3004W	SOD-123	400	0.225	300	4	1	0.1	0.1	240	0.05	Fig.7
MMSD914	SOD-123	400	0.2	75	2	1	2.5	0.01	75	0.004	Fig.7
BAV19W	SOD-123	410	0.25	120	1	1	0.1	0.1	100	0.05	Fig.7
BAV20W	SOD-123	410	0.25	200	1	1	0.1	0.1	150	0.05	Fig.7
BAV21W	SOD-123	410	0.25	250	1	1	0.1	0.1	200	0.05	Fig.7
MMBD3004S	SOT-23	410	0.225	350	4	1	0.1	0.1	240	0.05	Fig.6
1N4448W	SOD-123	500	0.25	100	2	1	0.025	0.1	20	0.004	Fig.7
1SS355	SOD-323	-	0.15	90	0.5	1.2	0.1	0.1	80	0.004	Fig.7
1SS355L	SOD-323FL	-	0.15	90	0.5	1.2	0.1	0.1	80	0.004	Fig.7
BAV199	SOT-23	-	0.215	70	-	1.25	0.005	0.15	75	3	Fig.6
DAP222	SOT-523	-	0.1	80	0.3	1.2	0.1	0.1	70	0.004	Fig.4
DAN222	SOT-523	-	0.1	80	0.3	1.2	0.1	0.1	70	0.004	Fig.5

Diodes

Internal structure



Transistors

- * Small signal transistor SMD version
- * Power transistor
- * Prebiased 100mA/500mA transistor

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Transistors

Small Signal Bipolar Transistors

Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P_C (W)	V_{CEO} (V)	I_C (A)	H_{FE}	V_{CE} (V)	I_C (mA)	$V_{CE(sat)}$ (V)	I_C (mA)	I_B (mA)	f_T (MHz)	
MMS9018-H	SOT-23	NPN	0.2	18	0.05	105-190	5	1	0.5	10	1	600	Fig.1
MMS9018-L	SOT-23	NPN	0.2	18	0.05	70-105	5	1	0.5	10	1	600	Fig.1
BCP68-25	SOT-223	NPN	1	20	1	160-375	1	500	0.5	1000	100	40	Fig.1
FMMT618	SOT-23	NPN	0.35	20	2.5	200	2	10	0.15	1000	10	100	Fig.1
BC818-16	SOT-23	NPN	0.3	25	0.5	100-250	1	100	0.7	500	50	170	Fig.1
BC818-25	SOT-23	NPN	0.3	25	0.5	160-400	1	100	0.7	500	50	170	Fig.1
BC818-40	SOT-23	NPN	0.3	25	0.5	250-630	1	100	0.7	500	50	170	Fig.1
MMBTH10	SOT-23	NPN	0.225	25	0.05	60	10	4	0.5	4	0.4	650	Fig.1
MMS8050-L	SOT-23	NPN	0.3	25	0.5	120-200	1	50	0.6	500	50	150	Fig.1
MMS8050-H	SOT-23	NPN	0.3	25	0.5	200-350	1	50	0.6	500	50	150	Fig.1
MMS9013L	SOT-23	NPN	0.3	25	0.5	120-200	1	50	0.6	500	50	150	Fig.1
MMS9013H	SOT-23	NPN	0.3	25	0.5	200-350	1	50	0.6	500	50	150	Fig.1
MMSS8050-H	SOT-23	NPN	0.3	25	1.5	200-350	1	100	0.5	800	80	100	Fig.1
MMSS8050-L	SOT-23	NPN	0.3	25	1.5	120-200	1	100	0.5	800	80	100	Fig.1
MMSS8050W-L	SOT-323	NPN	0.2	25	1.5	120-200	1	100	0.5	800	80	100	Fig.1
MMSS8050W-H	SOT-323	NPN	0.2	25	1.5	200-350	1	100	0.5	800	80	100	Fig.1
MMSS8050W-J	SOT-323	NPN	0.2	25	1.5	300-400	1	100	0.5	800	80	100	Fig.1
MS8050-L	SOT-23	NPN	0.2	25	0.8	80-200	1	5	0.5	800	80	150	Fig.1
MS8050-H	SOT-23	NPN	0.2	25	0.8	200-300	1	5	0.5	800	80	150	Fig.1
2SC2859-Y	SOT-23	NPN	0.15	30	0.5	120-240	1	100	0.25	100	10	300	Fig.1
2SC3265-Y	SOT-23	NPN	0.2	30	0.8	160-320	1	100	0.5	500	20	120	Fig.1
2SC4215-Y	SOT-323	NPN	0.1	30	0.02	100-200	6	1	-	-	-	260	Fig.1
BC848A	SOT-23	NPN	0.225	30	0.1	110-220	5	2	0.5	100	5	100	Fig.1
BC848B	SOT-23	NPN	0.225	30	0.1	200-450	5	2	0.5	100	5	100	Fig.1
BC848C	SOT-23	NPN	0.225	30	0.1	420-800	5	2	0.5	100	5	100	Fig.1
BC849B	SOT-23	NPN	0.225	30	0.1	200-450	5	2	0.5	100	5	100	Fig.1
BC849C	SOT-23	NPN	0.225	30	0.1	420-800	5	2	0.5	100	5	100	Fig.1
BC848AW	SOT-323	NPN	0.2	30	0.1	110-220	5	2	0.25	10	0.5	100	Fig.1
BC848BW	SOT-323	NPN	0.2	30	0.1	200-450	5	2	0.25	10	0.5	100	Fig.1
BC848CW	SOT-323	NPN	0.2	30	0.1	420-800	5	2	0.25	10	0.5	100	Fig.1
BCV27	SOT-23	NPN	0.3	30	0.5	4000	1	0.1	1	100	0.1	170	Fig.1
FMMT449	SOT-23	NPN	0.2	30	1	100-300	2	500	0.5	1000	100	150	Fig.1
KTC3876-Y	SOT-23	NPN	0.2	30	0.5	120-240	1	100	0.25	100	10	300	Fig.1
KTC3876-GR	SOT-23	NPN	0.2	30	0.5	200-400	1	100	0.25	100	10	300	Fig.1
MMBTA13	SOT-23	NPN	0.225	30	0.3	5000	5	10	1.5	100	0.1	125	Fig.1
MMBTA14	SOT-23	NPN	0.225	30	0.3	10000	5	10	1.5	100	0.1	125	Fig.1
2SC2411-P	SOT-23	NPN	0.2	32	0.5	82-180	3	100	0.4	500	50	250	Fig.1
2SC2411-Q	SOT-23	NPN	0.2	32	0.5	120-270	3	100	0.4	500	50	250	Fig.1
2SC2411-R	SOT-23	NPN	0.2	32	0.5	180-390	3	100	0.4	500	50	250	Fig.1
2SC4097-P	SOT-323	NPN	0.2	32	0.5	82-180	3	10	0.4	100	10	250	Fig.1
2SC4097-Q	SOT-323	NPN	0.2	32	0.5	120-270	3	10	0.4	100	10	250	Fig.1
2SC4097-R	SOT-323	NPN	0.2	32	0.5	180-390	3	10	0.4	100	10	250	Fig.1
MMBT2222A	SOT-23	NPN	0.35	40	0.6	75	10	10	0.3	150	15	300	Fig.1
MMBT2222AT	SOT-523	NPN	0.15	40	0.6	100-300	10	150	1	500	50	300	Fig.1

Small Signal Bipolar Transistors

Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P _C (W)	V _{CE0} (V)	I _C (A)	H _{FE}	V _{CE} (V)	I _C (mA)	V _{CE(sat)} (V)	I _C (mA)	I _B (mA)	f _T (MHz)	
MMBT3904	SOT-23	NPN	0.35	40	0.2	100-300	1	10	0.2	10	1	300	Fig.1
MMBT3904T	SOT-523	NPN	0.15	40	0.2	100-300	1	10	0.3	50	5	300	Fig.1
MMBT4401	SOT-23	NPN	0.35	40	0.6	80	1	10	0.4	150	15	250	Fig.1
MMST2222A	SOT-323	NPN	0.2	40	0.6	100-300	10	150	0.6	500	50	300	Fig.1
MMST3904	SOT-323	NPN	0.2	40	0.2	100-300	1	10	0.3	50	5	300	Fig.1
MMST4401	SOT-323	NPN	0.2	40	0.6	40	2	500	0.4	150	15	250	Fig.1
PZT2222A	SOT-223	NPN	1	40	0.6	100-300	10	150	0.3	150	15	300	Fig.1
PZT3904	SOT-223	NPN	1	40	0.2	100-300	1	10	0.2	10	1	300	Fig.1
PZT4401	SOT-223	NPN	1	40	0.6	80	1	10	0.75	500	50	250	Fig.1
BC817-16	SOT-23	NPN	0.3	45	0.5	100-250	1	100	0.7	500	50	100	Fig.1
BC817-25	SOT-23	NPN	0.3	45	0.5	160-400	1	100	0.7	500	50	100	Fig.1
BC817-40	SOT-23	NPN	0.3	45	0.5	250-600	1	100	0.7	500	50	100	Fig.1
BC817-16W	SOT-323	NPN	0.2	45	0.5	100-250	1	100	0.7	500	50	100	Fig.1
BC817-25W	SOT-323	NPN	0.2	45	0.5	160-400	1	100	0.7	500	50	100	Fig.1
BC817-40W	SOT-323	NPN	0.2	45	0.5	250-600	1	100	0.7	500	50	100	Fig.1
BC817K-25	SOT-23	NPN	0.5	45	0.5	160-400	1	100	0.7	500	50	100	Fig.1
BC847A	SOT-23	NPN	0.225	45	0.1	110-220	5	2	0.5	100	5	100	Fig.1
BC847B	SOT-23	NPN	0.225	45	0.1	200-450	5	2	0.5	100	5	100	Fig.1
BC847C	SOT-23	NPN	0.225	45	0.1	420-800	5	2	0.5	100	5	100	Fig.1
BC847AW	SOT-323	NPN	0.2	45	0.1	110-220	5	2	0.25	10	0.5	100	Fig.1
BC847BW	SOT-323	NPN	0.2	45	0.1	200-450	5	2	0.25	10	0.5	100	Fig.1
BC847CW	SOT-323	NPN	0.2	45	0.1	420-800	5	2	0.25	10	0.5	100	Fig.1
BC847AT	SOT-523	NPN	0.15	45	0.1	110-220	5	2	0.6	100	5	100	Fig.1
BC847BT	SOT-523	NPN	0.15	45	0.1	200-450	5	2	0.6	100	5	100	Fig.1
BC847CT	SOT-523	NPN	0.15	45	0.1	420-800	5	2	0.6	100	5	100	Fig.1
BCP54-16	SOT-223	NPN	1.5	45	1	100-250	2	150	0.5	500	50	100	Fig.1
BCW66F	SOT-23	NPN	0.2	45	0.8	100-250	1	100	0.3	100	10	100	Fig.1
BCW66G	SOT-23	NPN	0.2	45	0.8	110	1	10	0.3	100	10	100	Fig.1
BCW66H	SOT-23	NPN	0.33	45	0.8	180	1	10	0.3	100	10	100	Fig.1
BCX70J	SOT-23	NPN	0.25	45	0.2	250-460	5	2	0.35	10	0.25	100	Fig.1
BCX70K	SOT-23	NPN	0.25	45	0.2	380-630	5	2	0.35	10	0.25	100	Fig.1
MMS9014-H	SOT-23	NPN	0.4	45	0.1	450-1000	5	1	0.3	100	5	150	Fig.1
MMS9014-L	SOT-23	NPN	0.4	45	0.1	200-450	5	1	0.3	100	5	150	Fig.1
2SC1623-L5	SOT-23	NPN	0.2	50	0.1	135-270	6	1	0.3	100	10	250	Fig.1
2SC1623-L6	SOT-23	NPN	0.2	50	0.1	200-400	6	1	0.3	100	10	250	Fig.1
2SC1623-L7	SOT-23	NPN	0.2	50	0.1	300-600	6	1	0.3	100	10	250	Fig.1
2SC2412-R	SOT-23	NPN	0.2	50	0.15	180-390	6	1	0.4	50	5	150	Fig.1
2SC2412-S	SOT-23	NPN	0.2	50	0.15	270-560	6	1	0.4	50	5	150	Fig.1
2SC2712-O	SOT-23	NPN	0.15	50	0.15	70-140	6	2	0.1	100	10	80	Fig.1
2SC2712-Y	SOT-23	NPN	0.15	50	0.15	120-240	6	2	0.1	100	10	80	Fig.1
2SC2712-GR	SOT-23	NPN	0.15	50	0.15	200-400	6	2	0.1	100	10	80	Fig.1
2SC2712-BL	SOT-23	NPN	0.15	50	0.15	350-700	6	2	0.1	100	10	80	Fig.1
2SC3052-E	SOT-23	NPN	0.15	50	0.2	150-300	6	1	0.3	100	10	180	Fig.1
2SC3052-F	SOT-23	NPN	0.15	50	0.2	250-500	6	1	0.3	100	10	180	Fig.1

Transistors

Small Signal Bipolar Transistors

Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P _c (W)	V _{CE0} (V)	I _c (A)	H _{FE}	V _{CE} (V)	I _c (mA)	V _{CE(sat)} (V)	I _c (mA)	I _b (mA)	f _T (MHz)	
2SC3052-G	SOT-23	NPN	0.15	50	0.2	400-800	6	1	0.3	100	10	180	Fig.1
2SC4081-A	SOT-323	NPN	0.2	50	0.15	120-270	6	1	0.4	50	5	180	Fig.1
2SC4081-B	SOT-323	NPN	0.2	50	0.15	180-390	6	1	0.4	50	5	180	Fig.1
2SC4617-R	SOT-523	NPN	0.15	50	0.15	180-390	6	1	0.4	50	5	180	Fig.1
2SC5658-Q	SOT-723	NPN	0.1	50	0.15	120-270	6	1	0.4	50	5	180	Fig.1
2SC5658-R	SOT-723	NPN	0.1	50	0.15	180-390	6	1	0.4	50	5	180	Fig.1
2SC5658-S	SOT-723	NPN	0.1	50	0.15	270-560	6	1	0.4	50	5	180	Fig.1
FMMT619	SOT-23	NPN	0.35	50	2	100	2	2000	0.2	1000	10	100	Fig.1
KTC3875-Y	SOT-23	NPN	0.15	50	0.15	120-240	6	2	0.25	100	10	80	Fig.1
KTC3875-GR	SOT-23	NPN	0.15	50	0.15	200-400	6	2	0.25	100	10	80	Fig.1
MMBT1815-L	SOT-23	NPN	0.2	50	0.15	130-200	6	2	0.25	100	10	80	Fig.1
MMBT1815-H	SOT-23	NPN	0.2	50	0.15	200-400	6	2	0.25	100	10	80	Fig.1
MMBT945-H	SOT-23	NPN	0.2	50	0.15	200-400	6	1	0.3	100	10	150	Fig.1
MMBT945-L	SOT-23	NPN	0.2	50	0.15	130-200	6	1	0.3	100	10	150	Fig.1
BCP55-16	SOT-223	NPN	1.5	60	1	100-250	2	150	0.5	500	50	100	Fig.1
BCV47	SOT-23	NPN	0.3	60	0.5	2000	1	0.1	1	100	0.1	170	Fig.1
FMMT491	SOT-23	NPN	0.5	60	1	80	5	1000	0.5	1000	100	150	Fig.1
MMBT1616A-Y	SOT-23	NPN	0.35	60	1	135-270	2	100	0.3	1000	50	100	Fig.1
MMBT1616A-G	SOT-23	NPN	0.35	60	1	200-400	2	100	0.3	1000	50	100	Fig.1
MMBT1616A-L	SOT-23	NPN	0.35	60	1	300-600	2	100	0.3	1000	50	100	Fig.1
MMBTA05	SOT-23	NPN	0.3	60	0.5	100	1	10	0.25	100	10	100	Fig.1
BC846A	SOT-23	NPN	0.225	65	0.1	110-220	5	2	0.5	100	5	100	Fig.1
BC846B	SOT-23	NPN	0.225	65	0.1	200-450	5	2	0.5	100	5	100	Fig.1
BC846AW	SOT-323	NPN	0.2	65	0.1	110-220	5	2	0.25	10	0.5	100	Fig.1
BC846BW	SOT-323	NPN	0.2	65	0.1	200-450	5	2	0.25	10	0.5	100	Fig.1
BCP56-16	SOT-223	NPN	1.5	80	1	100-250	2	150	0.5	500	50	100	Fig.1
BCP76	SOT-223	NPN	1.5	80	3	40-160	1	2	0.5	500	50	10	Fig.1
MMBTA06	SOT-23	NPN	0.3	80	0.5	100	1	10	0.25	100	10	100	Fig.1
MMBTA28	SOT-23	NPN	0.2	80	0.5	10000	5	10	1.5	100	0.1	125	Fig.1
MMBTA28L	SOT-23-3L	NPN	0.2	80	0.5	10000	5	10	1.2	10	0.01	125	Fig.8
FMMT493	SOT-23	NPN	0.25	100	1	20	10	1000	0.3	500	50	150	Fig.1
MMBT5550	SOT-23	NPN	0.225	140	0.6	60	5	10	0.15	10	1	Fig.1	
MMBT5551	SOT-23	NPN	0.3	160	0.6	100-300	5	10	0.2	50	5	100	Fig.1
MMST5551	SOT-323	NPN	0.2	160	0.2	30	5	50	0.2	50	5	300	Fig.1
PZT5551	SOT-223	NPN	1	160	0.6	80	5	1	0.15	10	1	300	Fig.1
MMBTA43	SOT-23	NPN	0.225	200	0.5	25	10	1	0.5	20	2	50	Fig.1
MMBTA42	SOT-23	NPN	0.35	300	0.5	40	10	10	0.5	20	2	50	Fig.1
MMSTA42	SOT-323	NPN	0.2	300	0.2	40	10	10	0.5	20	2	50	Fig.1
PZTA42	SOT-223	NPN	1	300	0.2	25	10	1	0.5	20	2	50	Fig.1
MMBTA44	SOT-23	NPN	0.35	400	0.1	40	10	1	0.75	50	5	50	Fig.1
PZTA44	SOT-223	NPN	1	400	0.2	50-200	10	10	0.5	10	1	20	Fig.1
BCP69-16	SOT-223	PNP	1	-20	-1	100-250	-1	-500	-0.5	-1000	-100	40	Fig.2
FMMT718	SOT-23	PNP	0.35	-20	-1.5	300	-2	-10	-0.2	-1000	-20	150	Fig.2
BC808-16	SOT-23	PNP	0.3	-25	-0.8	100-250	-1	-100	-0.7	-500	-50	100	Fig.2

Small Signal Bipolar Transistors

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			P _C (W)	V _{CEO} (V)	I _C (A)	H _{FE}	V _{CE} (V)	I _C (mA)	V _{CE(sat)} (V)	I _C (mA)	I _B (mA)	f _T (MHz)	
BC808-25	SOT-23	PNP	0.3	-25	-0.8	160-400	-1	-100	-0.7	-500	-50	100	Fig.2
BC808-40	SOT-23	PNP	0.3	-25	-0.8	250-630	-1	-100	-0.7	-500	-50	100	Fig.2
MMS8550-L	SOT-23	PNP	0.3	-25	-0.5	120-200	-1	-50	-0.6	-500	-50	150	Fig.2
MMS8550-H	SOT-23	PNP	0.3	-25	-0.5	200-350	-1	-50	-0.6	-500	-50	150	Fig.2
MMS9012-L	SOT-23	PNP	0.3	-25	-0.5	120-200	-1	-50	-0.6	-500	-50	150	Fig.2
MMS9012-H	SOT-23	PNP	0.3	-25	-0.5	200-350	-1	-50	-0.6	-500	-50	150	Fig.2
MMSS8550-L	SOT-23	PNP	0.3	-25	-1.5	120-200	-1	-100	-0.5	-800	-80	100	Fig.2
MMSS8550-H	SOT-23	PNP	0.3	-25	-1.5	200-350	-1	-100	-0.5	-800	-80	100	Fig.2
MMSS8550W-L	SOT-323	PNP	0.2	-25	1.5	120-200	-1	-100	-0.5	-800	-80	100	Fig.2
MMSS8550W-H	SOT-323	PNP	0.2	-25	1.5	200-350	-1	-100	-0.5	-800	-80	100	Fig.2
MMSS8550W-J	SOT-323	PNP	0.2	-25	1.5	300-400	-1	-100	-0.5	-800	-80	100	Fig.2
2SA1298-Y	SOT-23	PNP	0.2	-30	-0.8	160-320	-1	-100	-0.4	-500	-20	250	Fig.2
BC858AW	SOT-323	PNP	0.15	-30	-0.1	125-250	-5	-2	-0.65	-100	-5	100	Fig.2
BC858BW	SOT-323	PNP	0.15	-30	-0.1	220-475	-5	-2	-0.65	-100	-5	100	Fig.2
BC858CW	SOT-323	PNP	0.15	-30	-0.1	420-800	-5	-2	-0.65	-100	-5	100	Fig.2
BC858A	SOT-23	PNP	0.31	-30	-0.1	125-250	-5	-2	-0.3	-10	-0.5	200	Fig.2
BC858B	SOT-23	PNP	0.31	-30	-0.1	220-475	-5	-2	-0.3	-10	-0.5	200	Fig.2
BC858C	SOT-23	PNP	0.31	-30	-0.1	420-800	-5	-2	-0.3	-10	-0.5	200	Fig.2
MMBT589	SOT-23	PNP	0.31	-30	-1	100	-2	-1	-0.25	-500	-50	100	Fig.2
2SA1036-Q	SOT-23	PNP	0.2	-32	-0.5	120-270	-3	-10	-0.4	-100	-10	200	Fig.2
2SA1036-R	SOT-23	PNP	0.2	-32	-0.5	180-390	-3	-10	-0.4	-100	-10	200	Fig.2
2SA1577-R	SOT-323	PNP	0.2	-32	-0.5	180-390	-3	-10	-0.4	-100	-10	200	Fig.2
2SB1197-P	SOT-23	PNP	0.2	-32	-0.8	82-180	-3	-100	-0.5	-500	-50	50	Fig.2
2SB1197-Q	SOT-23	PNP	0.2	-32	-0.8	120-270	-3	-100	-0.5	-500	-50	50	Fig.2
2SB1197-R	SOT-23	PNP	0.2	-32	-0.8	180-390	-3	-100	-0.5	-500	-50	50	Fig.2
FMMT720	SOT-23	PNP	0.35	-40	-1.5	60	-2	-1500	-0.04	-100	-10	150	Fig.2
MMBT3906	SOT-23	PNP	0.3	-40	-0.2	100-300	-1	-10	-0.25	-10	-1	250	Fig.2
MMBT3906T	SOT-523	PNP	0.15	-40	-0.2	100-300	-1	-10	-0.25	-10	-1	250	Fig.2
MMBT4403	SOT-23	PNP	0.35	-40	-0.6	100	-1	-10	-0.4	-150	-15	200	Fig.2
MMST3906	SOT-323	PNP	0.2	-40	-0.2	100-300	-1	-10	-0.3	-50	-5	300	Fig.2
MMST4403	SOT-323	PNP	0.2	-40	-0.6	100-300	-2	-150	-0.4	-150	-15	200	Fig.2
BC807-16	SOT-23	PNP	0.3	-45	-0.5	100-250	-1	-100	-0.7	500	50	100	Fig.2
BC807-25	SOT-23	PNP	0.3	-45	-0.5	160-400	-1	-100	-0.7	500	50	100	Fig.2
BC807-40	SOT-23	PNP	0.3	-45	-0.5	250-600	-1	-100	-0.7	500	50	100	Fig.2
BC807-16W	SOT-323	PNP	0.2	-45	-0.5	100-250	-1	-100	-0.7	-500	-50	80	Fig.2
BC807-25W	SOT-323	PNP	0.2	-45	-0.5	160-400	-1	-100	-0.7	-500	-50	80	Fig.2
BC807-40W	SOT-323	PNP	0.2	-45	-0.5	250-600	-1	-100	-0.7	-500	-50	80	Fig.2
BC857AW	SOT-323	PNP	0.15	-45	-0.1	125-250	-5	-2	-0.65	-100	-5	100	Fig.2
BC857BW	SOT-323	PNP	0.15	-45	-0.1	220-475	-5	-2	-0.65	-100	-5	100	Fig.2
BC857CW	SOT-323	PNP	0.15	-45	-0.1	420-800	-5	-2	-0.65	-100	-5	100	Fig.2
BC857A	SOT-23	PNP	0.31	-45	-0.1	125-250	-5	-2	-0.3	-10	-0.5	200	Fig.2
BC857B	SOT-23	PNP	0.31	-45	-0.1	220-475	-5	-2	-0.3	-10	-0.5	200	Fig.2
BC857C	SOT-23	PNP	0.31	-45	-0.1	420-800	-5	-2	-0.3	-10	-0.5	200	Fig.2
BC857AT	SOT-523	PNP	0.15	-45	-0.1	125-250	-5	-2	-0.65	-100	-5	100	Fig.2

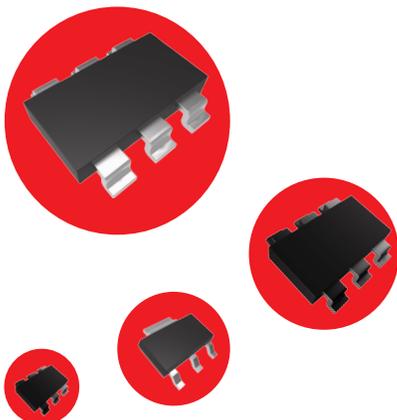
Transistors

Small Signal Bipolar Transistors

Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P_c (W)	V_{CEO} (V)	I_c (A)	H_{FE}	V_{CE} (V)	I_c (mA)	$V_{CE(sat)}$ (V)	I_c (mA)	I_b (mA)	f_T (MHz)	
BC857BT	SOT-523	PNP	0.15	-45	-0.1	220-475	-5	-2	-0.65	-100	-5	100	Fig.2
BC857CT	SOT-523	PNP	0.15	-45	-0.1	420-800	-5	-2	-0.65	-100	-5	100	Fig.2
BCP51-16	SOT-223	PNP	1.5	-45	-1	100-250	-2	-150	-0.5	-500	-50	100	Fig.2
BCW68G	SOT-23	PNP	0.33	-45	-0.8	160-240	-1	-100	-0.3	-100	-10	200	Fig.2
BCW68H	SOT-23	PNP	0.33	-45	-0.8	250-630	-2	-100	-0.3	-100	-10	100	Fig.2
MMS9015-H	SOT-23	PNP	0.2	-45	-0.1	450-1000	-5	-1	-0.3	-100	-10	150	Fig.2
MMS9015-L	SOT-23	PNP	0.2	-45	-0.1	200-450	-5	-1	-0.3	-100	-10	150	Fig.2
2SA1037-Q	SOT-23	PNP	0.2	-50	-0.15	120-270	-6	-1	-0.5	-5	-5	120	Fig.2
2SA1037-R	SOT-23	PNP	0.2	-50	-0.15	180-390	-6	-1	-0.5	-5	-5	120	Fig.2
2SA1162-Y	SOT-23	PNP	0.15	-50	-0.15	120-240	-6	-2	-0.3	-100	-10	80	Fig.2
2SA1162-GR	SOT-23	PNP	0.15	-50	-0.15	200-400	-6	-2	-0.3	-100	-10	80	Fig.2
2SA1576A-Q	SOT-323	PNP	0.2	-50	-0.15	120-270	-6	-1	-0.5	-50	-5	100	Fig.2
2SA1576A-R	SOT-323	PNP	0.2	-50	-0.15	180-390	-6	-1	-0.5	-50	-5	100	Fig.2
2SA1774-R	SOT-523	PNP	0.15	-50	-0.15	180-390	-6	-1	-0.5	-50	-5	140	Fig.2
2SA1832-GR	SOT-523	PNP	0.1	-50	-0.15	200-400	-6	-1	-0.3	-100	-10	80	Fig.2
2SA2029-Q	SOT-723	PNP	0.15	-50	-0.15	120-270	-6	-1	-0.5	-50	-5	140	Fig.2
2SA2029-R	SOT-723	PNP	0.15	-50	-0.15	180-390	-6	-1	-0.5	-50	-5	140	Fig.2
2SA2029-S	SOT-723	PNP	0.15	-50	-0.15	270-560	-6	-1	-0.5	-50	-5	140	Fig.2
2SA812-M6	SOT-23	PNP	0.2	-50	-0.1	200-400	-6	-1	-0.3	-100	-10	180	Fig.2
2SA812-M7	SOT-23	PNP	0.2	-50	-0.1	300-600	-6	-1	-0.3	-100	-10	180	Fig.2
KTA1504-O	SOT-23	PNP	0.15	-50	-0.15	70-140	-6	-2	-0.3	-100	-10	80	Fig.2
KTA1504-Y	SOT-23	PNP	0.15	-50	-0.15	120-240	-6	-2	-0.3	-100	-10	80	Fig.2
KTA1504-GR	SOT-23	PNP	0.15	-50	-0.15	200-400	-6	-2	-0.3	-100	-10	80	Fig.2
MMBT1015-L	SOT-23	PNP	0.25	-50	-0.15	130-200	-6	-2	-0.3	-100	-10	80	Fig.2
MMBT1015-H	SOT-23	PNP	0.25	-50	-0.15	200-400	-6	-2	-0.3	-100	-10	80	Fig.2
BCP52-16	SOT-223	PNP	1.5	-60	-1	100-250	-2	-150	-0.5	-500	-50	100	Fig.2
FMMT591	SOT-23	PNP	0.5	-60	-1	100-300	-5	-500	-0.6	-1000	-100	150	Fig.2
MMBT2907A	SOT-23	PNP	0.35	-60	-0.6	100	-10	-10	-0.4	-150	-15	200	Fig.2
MMBT2907AT	SOT-523	PNP	0.15	-60	-0.6	100-300	-10	-10	-0.4	-150	-15	140	Fig.2
MMBTA55	SOT-23	PNP	0.225	-60	-0.5	100	-1	-10	-0.25	-100	-10	50	Fig.2
MMST2907A	SOT-323	PNP	0.2	-60	-0.6	100	-10	-1	-1.6	-500	-50	200	Fig.2
PZT2907A	SOT-223	PNP	1	-60	-0.6	100-300	-10	-150	-0.4	-150	-15	200	Fig.2
BC856A	SOT-23	PNP	0.31	-65	-0.1	125-250	-5	-2	-0.3	-10	-0.5	200	Fig.2
BC856B	SOT-23	PNP	0.31	-65	-0.1	220-475	-5	-2	-0.3	-10	-0.5	200	Fig.2
BC856BW	SOT-323	PNP	0.15	-65	-0.1	220-475	-5	-2	-0.65	-100	-5	100	Fig.2
BC856AW	SOT-323	PNP	0.15	-65	-0.1	125-250	-5	-2	-0.65	-100	-5	100	Fig.2
BCP53-16	SOT-223	PNP	1.5	-80	-1	100-250	-2	-150	-0.5	-500	-50	100	Fig.2
MMBTA56	SOT-23	PNP	0.225	-80	-0.5	100	-1	-10	-0.25	-100	-10	50	Fig.2
FMMT593	SOT-23	PNP	0.25	-100	-1	100-300	-5	-500	-0.3	-500	-50	150	Fig.2
MMBT5401	SOT-23	PNP	0.3	-150	-0.6	100-300	-5	-10	-0.5	-50	-5	100	Fig.2
MMST5401	SOT-323	PNP	0.2	-150	-0.2	60-300	-5	-10	-0.5	-50	-5	300	Fig.2
PZT5401	SOT-223	PNP	1	-150	-0.6	50	-5	-1	-0.2	-10	-1	300	Fig.2
MMBTA93	SOT-23	PNP	0.3	-200	-0.5	25	-10	-1	-0.5	-20	-2	50	Fig.2
MMBTA92	SOT-23	PNP	0.3	-300	-0.3	100-200	-10	-10	-0.2	-20	-2	50	Fig.2

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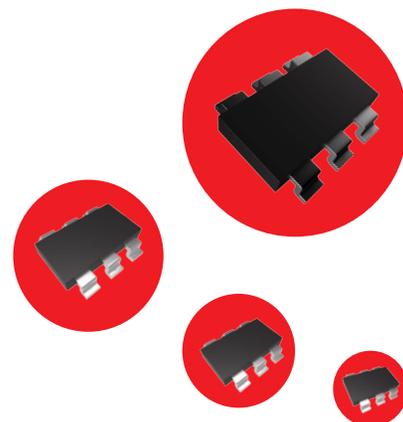
Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P_c (W)	V_{CE0} (V)	I_c (A)	H_{FE}	V_{CE} (V)	I_c (mA)	$V_{CE(sat)}$ (V)	I_c (mA)	I_b (mA)	f_T (MHz)	
MMSTA92	SOT-323	PNP	0.2	-300	-0.1	40	-10	-10	-0.5	-20	-2	50	Fig.2
MMBTA94	SOT-23	PNP	0.35	-400	-0.1	70	-10	-1	-0.2	-10	-1	50	Fig.2
PZTA94	SOT-223	PNP	1	-400	-0.2	80-300	-10	-10	-0.2	-10	-1	50	Fig.2
UMX18N	SOT-363	NPN*2	0.15	12	0.15	270-680	2	10	0.25	200	10	320	Fig.14
DMMT3904	SOT-363	NPN*2	0.2	40	0.2	100-300	1	10	0.3	50	5	300	Fig.15
MMDT2222A	SOT-363	NPN*2	0.15	40	0.6	100-300	10	150	1	500	50	300	Fig.14
MMDT3904	SOT-363	NPN*2	0.2	40	0.2	100-300	1	10	0.3	50	5	300	Fig.14
MMDT3904V	SOT-563	NPN*2	0.2	40	0.2	30	1	100	0.3	50	5	300	Fig.14
MMDT4401	SOT-363	NPN*2	0.2	40	0.6	40	2	500	0.75	500	50	250	Fig.14
BC847BS	SOT-363	NPN*2	0.3	45	0.1	200-450	5	2	0.65	100	5	200	Fig.14
BC847BV	SOT-563	NPN*2	0.15	45	0.1	200-450	5	2	0.3	100	5	100	Fig.14
UMX1N	SOT-363	NPN*2	0.15	50	0.15	120-560	6	1	0.4	50	5	180	Fig.14
UMX3N	SOT-363	NPN*2	0.15	50	0.15	120-560	6	1	0.4	50	5	180	Fig.17
BC846S	SOT-363	NPN*2	0.2	65	0.1	110	5	2	0.1	10	0.5	100	Fig.14
BC846BS	SOT-363	NPN*2	0.2	65	0.1	200-450	5	2	0.1	10	0.5	100	Fig.14
MMDT5551	SOT-363	NPN*2	0.2	160	0.2	100-300	5	10	0.15	10	1	300	Fig.14
SMBT5551	SOT23-6L	NPN*2	0.3	160	0.6	100-300	5	10	0.15	10	1	300	Fig.11
DMMT3906	SOT-363	PNP*2	0.2	-40	-0.2	100-300	-1	-10	-0.4	-50	-5	250	Fig.16
MMDT3906	SOT-363	PNP*2	0.2	-40	-0.2	100-300	-1	-10	-0.4	-50	-5	250	Fig.5
MMDT3906V	SOT-563	PNP*2	0.15	-40	-0.2	100-300	-1	-10	-0.4	-50	-5	250	Fig.5
MMDT4403	SOT-363	PNP*2	0.2	-40	-0.6	20	-2	-500	-0.75	-500	-50	200	Fig.5
BC807U	SOT-363	PNP*2	0.3	-45	-0.5	160-400	-1	-100	-0.7	-500	-50	200	Fig.5
BC857BS	SOT-363	PNP*2	0.3	-45	-0.2	220-475	-5	-2	-0.3	-10	-0.5	200	Fig.5
BC857BV	SOT-563	PNP*2	0.15	-45	-0.1	200-475	-5	-2	-0.4	-100	-5	100	Fig.5
BC857S	SOT-363	PNP*2	0.3	-45	-0.2	125-630	-5	-2	-0.3	-10	-0.5	200	Fig.5
UMT1N	SOT-363	PNP*2	0.15	-50	-0.15	120-560	-6	-1	-0.5	-50	-5	140	Fig.5
MMDT2907A	SOT-363	PNP*2	0.2	-60	0.6	100	-10	-10	-0.4	-150	-15	200	Fig.5
SMBT2907A	SOT23-6L	PNP*2	0.7	-60	-0.6	100-300	-10	-150	-0.4	-150	-15	200	Fig.12
BC856BS	SOT-363	PNP*2	0.2	-65	-0.1	200-450	-5	-2	-0.1	-10	-0.5	100	Fig.5
BC856S	SOT-363	PNP*2	0.2	-65	-0.1	110	-5	-2	-0.1	-10	-0.5	100	Fig.5
MMDT5401	SOT-363	PNP*2	0.2	-150	-0.2	100-300	-5	-10	-0.5	-50	-5	300	Fig.5
SMBT445V6	SOT23-6L	NPN+Zener	0.38	40	0.6	100-300	1	0.15	0.4	150	15	250	Fig.19



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Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P_C (W)	V_{CEO} (V)	I_C (A)	H_{FE}	V_{CE} (V)	I_C (mA)	$V_{CE(sat)}$ (V)	I_C (mA)	I_B (mA)	f_T (MHz)	
MMDT3946	SOT-363	NPN	0.2	40	0.2	100-300	1	10	0.3	50	5	300	Fig.3
		PNP		-40	-5	100-300	-1	-10	-0.25	-10	-1	250	
MMDT4413	SOT-363	NPN	0.2	40	0.6	40	2	500	0.75	500	50	250	Fig.3
		PNP		-40	-0.6	20	-2	-500	-0.75	-500	-50	200	
MMDT2227	SOT-363	NPN	0.2	40	0.6	35	10	0.1	0.3	150	15	300	Fig.3
		PNP		-60	-0.6	75	-10	-0.1	-0.4	-150	-15	200	
SMBT2227A	SOT23-6L	NPN	0.7	40	0.6	100-300	10	150	0.3	150	15	300	Fig.18
		PNP		-60	-0.6	100-300	-10	-150	-0.4	-150	-15	200	
BC817DPN	SOT23-6L	NPN	0.37	45	0.5	160-400	1	100	0.7	500	50	100	Fig.3
		PNP		-45	-0.5	160-400	-1	-100	-0.7	-500	-50	80	
BC847PN	SOT-363	NPN	0.2	45	0.1	200-450	5	2	0.25	10	0.5	100	Fig.3
		PNP		-45	-0.1	220~475	-5	-2	-0.3	-10	-0.5	100	
EMZ1	SOT-563	NPN	0.15	50	0.15	120-560	6	1	0.4	50	5	180	Fig.3
		PNP		-50	-0.15	120-560	-6	-1	-0.5	-50	-5	140	
UMZ1N	SOT-363	NPN	0.15	50	0.15	120-560	6	1	0.4	50	5	140	Fig.3
		PNP		-50	-0.15	120-560	-6	-1	-0.5	-50	-5	140	
UMZ2N	SOT-363	NPN	0.15	50	0.15	120-560	6	1	0.4	50	5	180	Fig.4
		PNP		-50	-0.15	120-560	-6	-1	-0.5	-50	-5	140	
BC846BPN	SOT-363	NPN	0.2	65	0.1	200-450	5	2	0.1	10	0.5	100	Fig.3
		PNP		-65	-0.1	200-450	-5	-2	-0.1	-10	-0.5	100	
MMDT5451	SOT-363	NPN	0.2	160	0.2	100-300	5	10	0.15	10	1	100	Fig.3
		PNP		-150	-0.2	100-300	-5	-10	-0.2	-10	-1	300	



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Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P _C (W)	V _{CE0} (V)	I _C (A)	H _{FE}	V _{CE} (V)	I _C (mA)	V _{CE(sat)} (V)	I _C (mA)	I _B (mA)	f _T (MHz)	
PXT8050-C	SOT-89	NPN	0.5	25	1.5	120-200	1	100	0.5	800	80	100	Fig.1
PXT8050-D	SOT-89	NPN	0.5	25	1.5	160-300	1	100	0.5	800	80	100	Fig.1
PXT8050-D3	SOT-89	NPN	0.5	25	1.5	300-400	1	100	0.5	800	80	100	Fig.1
2SC2883-Y	SOT-89	NPN	0.5	30	1.5	160-320	2	500	2	1500	30	120	Fig.1
BD882-R	SOT-89	NPN	0.5	30	3	60-120	2	1000	0.5	2000	200	50	Fig.1
BD882-O	SOT-89	NPN	0.5	30	3	100-200	2	1000	0.5	2000	200	50	Fig.1
BD882-Y	SOT-89	NPN	0.5	30	3	160-320	2	1000	0.5	2000	200	50	Fig.1
BD882-GR	SOT-89	NPN	0.5	30	3	200-400	2	1000	0.5	2000	200	50	Fig.1
2SD1664-R	SOT-89	NPN	0.5	32	1	180-390	3	100	0.4	500	50	150	Fig.1
2SD1766-P	SOT-89	NPN	0.5	32	1	82-180	3	500	0.8	2000	200	100	Fig.1
2SD1766-Q	SOT-89	NPN	0.5	32	1	120-270	3	500	0.8	2000	200	100	Fig.1
2SD1766-R	SOT-89	NPN	0.5	32	1	180-390	3	500	0.8	2000	200	100	Fig.1
PXT2222A	SOT-89	NPN	0.5	40	0.6	100-300	10	150	0.3	150	15	300	Fig.1
PXT3904	SOT-89	NPN	0.5	40	0.2	100-300	1	10	0.2	10	1	300	Fig.1
TIP29	TO-220	NPN	30	40	1	40	4	200	0.7	1000	125	3	Fig.1
TIP31	TO-220	NPN	2	40	3	25	4	1000	1.2	3000	375	3	Fig.1
TIP41	TO-220	NPN	2	40	6	30	4	300	1.5	6000	600	3	Fig.1
BCX54	SOT-89	NPN	0.5	45	1	63-250	2	150	0.5	500	50	130	Fig.1
BCX54-16	SOT-89	NPN	0.5	45	1	100-250	2	150	0.5	500	50	130	Fig.1
2SC2873-O	SOT-89	NPN	0.5	50	2	70-140	2	500	0.5	1000	50	120	Fig.1
2SC2873-Y	SOT-89	NPN	0.5	50	2	120-240	2	500	0.5	1000	50	120	Fig.1
2SD1899-M	DPAK	NPN	1	60	3	100-200	2	600	0.25	1500	150	120	Fig.1
2SD1899-K	DPAK	NPN	1	60	3	200-400	2	600	0.25	1500	150	120	Fig.1
BCX55	SOT-89	NPN	0.5	60	1	63-250	2	150	0.5	500	50	130	Fig.1
BCX55-16	SOT-89	NPN	0.5	60	1	100-250	2	150	0.5	500	50	130	Fig.1
MMJD3055	DPAK	NPN	1.25	60	10	20-100	4	4000	1.1	4000	400	2	Fig.1
TIP100	TO-220	NPN	80	60	8	1000-20000	4	3000	2	3000	6	-	Fig.8
TIP110	TO-220	NPN	2	60	2	1000	4	1000	2.5	2000	8	-	Fig.8
TIP120	TO-220	NPN	65	60	5	1000	3	500	2	3000	12	-	Fig.8
TIP29A	TO-220	NPN	30	60	1	40	4	200	0.7	1000	125	3	Fig.1
TIP31A	TO-220	NPN	2	60	3	25	4	1000	1.2	3000	375	3	Fig.1
TIP41A	TO-220	NPN	2	60	6	30	4	300	1.5	6000	600	3	Fig.1
2N6388	TO-220	NPN	65	80	10	1000-20000	3	5000	2	5000	10	-	Fig.1
2SD1898-P	SOT-89	NPN	0.5	80	1	82-180	3	500	0.15	500	20	100	Fig.1
2SD1898-Q	SOT-89	NPN	0.5	80	1	120-270	3	500	0.15	500	20	100	Fig.1
2SD1898-R	SOT-89	NPN	0.5	80	1	180-390	3	500	0.15	500	20	100	Fig.1
BCX56	SOT-89	NPN	0.5	80	1	63-250	2	150	0.5	500	50	130	Fig.1
BCX56-16	SOT-89	NPN	0.5	80	1	100-250	2	150	0.5	500	50	130	Fig.1
BSR43	SOT-89	NPN	0.5	80	1	100-300	5	100	0.5	500	50	100	Fig.1
TIP101	TO-220	NPN	80	80	8	1000-20000	4	3000	2	3000	6	-	Fig.8
TIP111	TO-220	NPN	2	80	2	1000	4	1000	2.5	2000	8	-	Fig.8
TIP29B	TO-220	NPN	30	80	1	40	4	200	0.7	1000	125	3	Fig.1
TIP31B	TO-220	NPN	2	80	3	25	4	1000	1.2	3000	375	3	Fig.1
TIP41B	TO-220	NPN	2	80	6	30	4	300	1.5	6000	600	3	Fig.1

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Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P_c (W)	V_{CEO} (V)	I_c (A)	H_{FE}	V_{CE} (V)	I_c (mA)	$V_{CE(sat)}$ (V)	I_c (mA)	I_b (mA)	f_T (MHz)	
2SD1815-R	DKPAK	NPN	1	100	3	100-200	5	500	0.4	1500	150	180	Fig.1
MJD112	DKPAK	NPN	1	100	2	500	3	500	2	2000	8	25	Fig.8
MJD122	DKPAK	NPN	1.5	100	8	1000-12000	4	4000	2	4000	16	-	Fig.8
MJD31C	DKPAK	NPN	1.25	100	3	10-50	4	3000	1.2	3000	375	3	Fig.1
TIP102	TO-220	NPN	80	100	8	1000-20000	4	3000	2	3000	6	-	Fig.8
TIP112	TO-220	NPN	2	100	2	1000	4	1000	2.5	2000	8	-	Fig.8
TIP122	TO-220	NPN	65	100	5	1000	3	500	2	3000	12	-	Fig.8
TIP29C	TO-220	NPN	30	100	1	40	4	200	0.7	1000	125	3	Fig.1
TIP31C	TO-220	NPN	2	100	3	25	4	1000	1.2	3000	375	3	Fig.1
TIP41C	TO-220	NPN	2	100	6	30	4	300	1.5	6000	600	3	Fig.1
2SC2881-O	SOT-89	NPN	0.5	120	0.8	80-160	5	100	1	500	50	120	Fig.1
2SC2881-Y	SOT-89	NPN	0.5	120	0.8	120-240	5	100	1	500	50	120	Fig.1
2SC2383P-O	SOT-89	NPN	0.5	160	1	100-200	5	200	1	500	50	20	Fig.1
2SC2383P-Y	SOT-89	NPN	0.5	160	1	160-320	5	200	1	500	50	20	Fig.1
CXT5551	SOT-89	NPN	0.5	160	0.6	80	5	1	0.15	10	1	100	Fig.1
MJE13003	TO-220	NPN	1.5	400	1.5	8.0-40	2	500	1	1000	250	5	Fig.1
PXTA44	SOT-89	NPN	0.5	400	0.3	50-200	10	10	0.4	1	0.1	-	Fig.1
2SB1386-Q	SOT-89	PNP	0.5	-20	-5	120-270	-2	-500	-1	-4000	-100	120	Fig.2
2SB1386-R	SOT-89	PNP	0.5	-20	-5	180-390	-2	-500	-1	-4000	-100	120	Fig.2
BC869	SOT-89	PNP	0.5	-20	-1	100-375	-1	-500	-0.5	-1000	-100	40	Fig.2
BC869-16	SOT-89	PNP	0.5	-20	-1	100-250	-1	-500	-0.5	-1000	-100	40	Fig.2
BC869-25	SOT-89	PNP	0.5	-20	-1	160-375	-1	-500	-0.5	-1000	-100	40	Fig.2
PXT8550-B	SOT-89	PNP	0.5	-25	-1.5	85-160	-1	-100	-0.5	-800	-80	100	Fig.2
PXT8550-C	SOT-89	PNP	0.5	-25	-1.5	120-200	-1	-100	-0.5	-800	-80	100	Fig.2
PXT8550-D	SOT-89	PNP	0.5	-25	-1.5	160-300	-1	-100	-0.5	-800	-80	100	Fig.2
PXT8550-D3	SOT-89	PNP	0.5	-25	-1.5	300-400	-1	-100	-0.5	-800	-80	100	Fig.2
2SB1412-Q	DKPAK	PNP	1	-30	-5	120-270	-2	-500	-1	-4000	-100	120	Fig.2
2SB1412-R	DKPAK	PNP	1	-30	-5	180-390	-2	-500	-1	-4000	-100	120	Fig.2
B772-O	DKPAK	PNP	1.25	-30	-3	100-200	-2	-1000	-0.5	-2000	-200	50	Fig.2
B772-Y	DKPAK	PNP	1.25	-30	-3	160-320	-2	-1000	-0.5	-2000	-200	50	Fig.2
B772-GR	DKPAK	PNP	1.25	-30	-3	200-400	-2	-1000	-0.5	-2000	-200	50	Fig.2
BD772-R	SOT-89	PNP	0.5	-30	-3	60-120	-2	-1000	-0.5	-2000	-200	80	Fig.2
BD772-O	SOT-89	PNP	0.5	-30	-3	100-200	-2	-1000	-0.5	-2000	-200	80	Fig.2
BD772-Y	SOT-89	PNP	0.5	-30	-3	160-320	-2	-1000	-0.5	-2000	-200	80	Fig.2
BD772-GR	SOT-89	PNP	0.5	-30	-3	200-400	-2	-1000	-0.5	-2000	-200	80	Fig.2
2SB1182-P	DKPAK	PNP	1.5	-32	-2	82-180	-3	-500	-0.8	-2000	-200	100	Fig.2
2SB1182-Q	DKPAK	PNP	1.5	-32	-2	120-270	-3	-500	-0.8	-2000	-200	100	Fig.2
2SB1182-R	DKPAK	PNP	1.5	-32	-2	180-390	-3	-500	-0.8	-2000	-200	100	Fig.2
2SB1188-Q	SOT-89	PNP	0.5	-32	-2	120-270	-3	-500	-0.8	-2000	-200	80	Fig.2
2SB1188-R	SOT-89	PNP	0.5	-32	-2	180-390	-3	-500	-0.8	-2000	-200	80	Fig.2
PXT3906	SOT-89	PNP	0.5	-40	-0.2	100-300	-1	-10	-0.25	-10	-1	250	Fig.2
TIP30	TO-220	PNP	30	-40	-1	40	-4	-200	-0.7	-1000	-125	3	Fig.2
TIP32	TO-220	PNP	2	-40	-3	25	-4	-1000	-1.2	-3000	-375	3	Fig.2
TIP42	TO-220	PNP	2	-40	-6	30	-4	-300	-1.5	-6000	-600	3	Fig.1

Medium Power Bipolar Transistors

Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Base-Emitter Saturation Voltage			Transition Frequency	Internal Structure
			P _C (W)	V _{CE0} (V)	I _C (A)	H _{FE}	V _{CE} (V)	I _C (mA)	V _{CE(sat)} (V)	I _C (mA)	I _B (mA)	f _T (MHz)	
BCX51	SOT-89	PNP	0.5	-45	-1	63-250	-2	-150	-0.5	-500	-50	50	Fig.2
BCX51-16	SOT-89	PNP	0.5	-45	-1	100-250	-2	-150	-0.5	-500	-50	50	Fig.2
2SA1213-Y	SOT-89	PNP	0.5	-50	-2	120-240	2	500	-0.5	1000	50	120	Fig.2
2SA1797-Q	SOT-89	PNP	0.5	-50	-2	120-270	-2	-500	-0.35	-1000	-50	200	Fig.2
2SB1184-P	DPAK	PNP	1	-50	-3	82-180	-3	-500	-1	-2000	-200	70	Fig.2
2SB1184-Q	DPAK	PNP	1	-50	-3	120-270	-3	-500	-1	-2000	-200	70	Fig.2
2SB1184-R	DPAK	PNP	1	-50	-3	180-390	-3	-500	-1	-2000	-200	70	Fig.2
2SA1952	DPAK	PNP	1	-60	-5	120-270	-2	-1000	-0.3	-3000	-150	80	Fig.2
2SB1261	DPAK	PNP	1	-60	-3	100-200	-2	-600	-0.3	-1500	-150	50	Fig.2
BCX52	SOT-89	PNP	0.5	-60	-1	63-250	-2	-150	-0.5	-500	-50	50	Fig.2
BCX52-16	SOT-89	PNP	0.5	-60	-1	100-250	-2	-150	-0.5	-500	-50	50	Fig.2
MMJD2955	DPAK	PNP	1.25	-60	-10	20-100	-4	-4000	-1.1	-4000	-400	2	Fig.2
PXT2907A	SOT-89	PNP	0.5	-60	-0.6	100-300	-10	-150	-0.4	-150	-15	200	Fig.2
TIP105	TO-220	PNP	80	-60	8	1000-20000	-4	-3000	-2	-3000	-6	-	Fig.9
TIP115	TO-220	PNP	2	-60	-2	1000	-4	-1000	-2.5	-2000	-8	-	Fig.9
TIP125	TO-220	PNP	2	-60	-5	1000	-3	-500	-2	-3000	-12	-	Fig.9
TIP30A	TO-220	PNP	30	-60	-1	40	-4	-200	-0.7	-1000	-125	3	Fig.2
TIP32A	TO-220	PNP	2	-60	-3	25	-4	-1000	-1.2	-3000	-375	3	Fig.2
TIP42A	TO-220	PNP	2	-60	-6	30	-4	-300	-1.5	-6000	-600	3	Fig.1
2SB1260-P	SOT-89	PNP	0.5	-80	-1	82-180	-3	-100	-0.4	-500	-50	80	Fig.2
2SB1260-Q	SOT-89	PNP	0.5	-80	-1	120-270	-3	-100	-0.4	-500	-50	80	Fig.2
2SB1260-R	SOT-89	PNP	0.5	-80	-1	180-390	-3	-100	-0.4	-500	-50	80	Fig.2
BCX53	SOT-89	PNP	0.5	-80	-1	63-250	-2	-150	-0.5	-500	-50	50	Fig.2
BCX53-16	SOT-89	PNP	0.5	-80	-1	100-250	-2	-150	-0.5	-500	-50	50	Fig.2
BSR33	SOT-89	PNP	0.5	-80	-1	100-300	-5	-100	-0.5	-500	-50	100	Fig.2
TIP106	TO-220	PNP	80	-80	-8	1000-20000	-4	-3000	-2	-3000	-6	-	Fig.9
TIP116	TO-220	PNP	2	-80	-2	1000	-4	-1000	-2.5	-2000	-8	-	Fig.9
TIP30B	TO-220	PNP	30	-80	-1	40	-4	-200	-0.7	-1000	-125	3	Fig.2
TIP32B	TO-220	PNP	2	-80	-3	25	-4	-1000	-1.2	-3000	-375	3	Fig.2
TIP42B	TO-220	PNP	2	-80	-6	30	-4	-300	-1.5	-6000	-600	3	Fig.1
MJD117	DPAK	PNP	1.75	-100	-2	1000-12000	-3	-2000	-2	-2000	-8	25	Fig.9
MJD127	DPAK	PNP	1.5	-100	-8	1000-12000	-4	-4000	-2	-4000	-16	-	Fig.9
MJD32C	DPAK	PNP	1.25	-100	-3	10-50	-4	-3000	-1.2	-3000	-375	3	Fig.2
MJD42C	DPAK	PNP	1.25	-100	-6	15-75	-4	-3000	-1.5	-6000	-600	3	Fig.2
TIP107	TO-220	PNP	80	-100	8	1000-20000	-4	-3000	-2	-3000	-6	-	Fig.9
TIP117	TO-220	PNP	2	-100	-2	1000	-4	-1000	-2.5	-2000	-8	-	Fig.9
TIP127	TO-220	PNP	2	-100	-5	1000	-3	-500	-2	-3000	-12	-	Fig.9
TIP127L	TO-220	PNP	2	-100	-5	1000	-3	-500	-2	-3000	-12	-	Fig.9
TIP30C	TO-220	PNP	30	-100	-1	40	-4	-200	-0.7	-1000	-125	3	Fig.2
TIP32C	TO-220	PNP	2	-100	-3	25	-4	-1000	-1.2	-3000	-375	3	Fig.2
TIP42C	TO-220	PNP	2	-100	-6	30	-4	-300	-1.5	-6000	-600	3	Fig.1
2SA1201-Y	SOT-89	PNP	0.5	-120	-0.8	120-240	-5	-100	-1	-500	-50	120	Fig.2
CXT5401	SOT-89	PNP	0.5	-150	-0.5	50	-5	-1	-0.2	-10	-1	100	Fig.2

Pre-biased Transistors

Part Number	Package	Polarity	Power Dissipation	Output current	Supply Voltage	DC Current Gain	Output Voltage	Input Resistance		Transition frequency	Internal Structure
			P _o (mW)	I _o (mA)	V _{cc} (V)	G _i	V _o (V)	R _i (KΩ)	R _z (KΩ)	f _r (MHZ)	
DTC123JM	SOT-723	NPN	100	100	50	80	0.3	2.2	47	250	Fig.2
DTC143TM	SOT-723	NPN	100	100	50	600	0.3	4.7	∞	250	Fig.1
DTC143ZM	SOT-723	NPN	100	100	50	80	0.3	4.7	47	250	Fig.2
DTC144EM	SOT-723	NPN	100	100	50	68	0.3	47	47	250	Fig.2
DTC114EE	SOT-523	NPN	150	100	50	30	0.3	10	10	250	Fig.2
DTC114EM	SOT-723	NPN	150	100	50	30	0.3	10	10	250	Fig.2
DTC114TE	SOT-523	NPN	150	100	50	300	0.3	10	∞	250	Fig.1
DTC114YE	SOT-523	NPN	150	100	50	68	0.3	10	47	250	Fig.2
DTC123JE	SOT-523	NPN	150	100	50	80	0.3	2.2	47	250	Fig.2
DTC124EE	SOT-523	NPN	150	100	50	56	0.3	22	22	250	Fig.2
DTC143EE	SOT-523	NPN	150	100	50	20	0.3	4.7	4.7	250	Fig.2
DTC143TE	SOT-523	NPN	150	100	50	300	0.3	4.7	∞	250	Fig.1
DTC143ZE	SOT-523	NPN	150	100	50	80	0.3	4.7	47	250	Fig.2
DTC144EE	SOT-523	NPN	150	100	50	68	0.3	47	47	250	Fig.2
DTC144TE	SOT-523	NPN	150	100	50	300	0.3	47	∞	250	Fig.1
DDTC123YCA	SOT-23	NPN	200	500	50	56	0.3	2.2	10	200	Fig.2
DTC113ZCA	SOT-23	NPN	200	100	50	33	0.3	1	10	250	Fig.2
DTC113ZUA	SOT-323	NPN	200	100	50	33	0.3	1	10	250	Fig.2
DTC114ECA	SOT-23	NPN	200	100	50	30	0.3	10	10	250	Fig.2
DTC114EUA	SOT-323	NPN	200	100	50	30	0.3	10	10	250	Fig.2
DTC114TCA	SOT-23	NPN	200	100	50	300	0.3	10	∞	250	Fig.1
DTC114TUA	SOT-323	NPN	200	100	50	300	0.3	10	∞	250	Fig.1
DTC114YCA	SOT-23	NPN	200	100	50	68	0.3	10	47	250	Fig.2
DTC114YUA	SOT-323	NPN	200	100	50	68	0.3	10	47	250	Fig.2
DTC123ECA	SOT-23	NPN	200	100	50	20	0.3	2.2	2.2	250	Fig.2
DTC123JCA	SOT-23	NPN	200	100	50	80	0.3	2.2	47	250	Fig.2
DTC123JUA	SOT-323	NPN	200	100	50	80	0.3	2.2	47	250	Fig.2
DTC123YCA	SOT-23	NPN	200	100	50	33	0.3	2.2	10	250	Fig.2
DTC123YUA	SOT-323	NPN	200	100	50	33	0.3	2.2	10	250	Fig.2
DTC124ECA	SOT-23	NPN	200	100	50	56	0.3	22	22	250	Fig.2
DTC124EUA	SOT-323	NPN	200	100	50	56	0.3	22	22	250	Fig.2
DTC143ECA	SOT-23	NPN	200	100	50	20	0.3	4.7	4.7	250	Fig.2
DTC143EUA	SOT-323	NPN	200	100	50	20	0.3	4.7	4.7	250	Fig.2
DTC143TCA	SOT-23	NPN	200	100	50	600	0.3	4.7	∞	250	Fig.1
DTC143TUA	SOT-323	NPN	200	100	50	300	0.3	4.7	∞	250	Fig.1
DTC143XCA	SOT-23	NPN	200	100	50	30	0.3	4.7	10	250	Fig.2
DTC143XUA	SOT-323	NPN	200	100	50	30	0.3	4.7	10	250	Fig.2
DTC143ZCA	SOT-23	NPN	200	100	50	80	0.3	4.7	47	250	Fig.2
DTC143ZUA	SOT-323	NPN	200	100	50	80	0.3	4.7	47	250	Fig.2
DTC144ECA	SOT-23	NPN	200	100	50	68	0.3	47	47	250	Fig.2
DTC144EUA	SOT-323	NPN	200	100	50	68	0.3	47	47	250	Fig.2
DTC144TCA	SOT-23	NPN	200	100	50	300	0.3	47	∞	250	Fig.1
DTC144TUA	SOT-323	NPN	200	100	50	300	0.3	47	∞	250	Fig.1
DDTC113ZCA	SOT-23	NPN	250	500	50	70	0.3	1	10	250	Fig.2

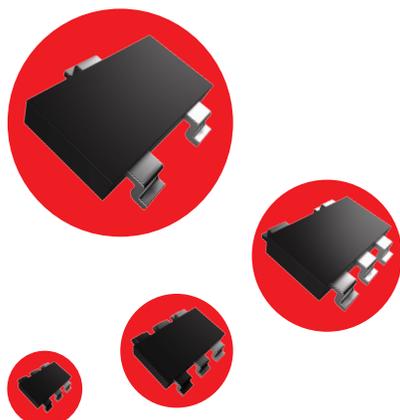
Transistors

Pre-biased Transistors

Part Number	Package	Polarity	Power Dissipation	Output current	Supply Voltage	DC Current Gain	Output Voltage	Input Resistance		Transition frequency	Internal Structure
			P _o (mW)	I _o (mA)	V _{cc} (V)	G _i	V _o (V)	R _i (KΩ)	R _z (KΩ)	f _r (MHZ)	
DTA123JM	SOT-723	PNP	100	-100	-50	80	-0.3	2.2	47	250	Fig.4
DTA114EE	SOT-523	PNP	150	-100	-50	30	-0.3	10	10	250	Fig.4
DTA114TE	SOT-523	PNP	150	-100	-50	250	-0.3	10	∞	250	Fig.3
DTA123JE	SOT-523	PNP	150	-100	-50	80	-0.3	2.2	47	250	Fig.4
DTA124EE	SOT-523	PNP	150	-100	-50	56	-0.3	22	22	250	Fig.4
DTA143EE	SOT-523	PNP	150	-100	-50	30	-0.3	4.7	4.7	250	Fig.4
DTA143ZE	SOT-523	PNP	150	-100	-50	80	-0.3	4.7	47	250	Fig.4
DTA144EE	SOT-523	PNP	150	-100	-50	68	-0.3	47	47	250	Fig.4
DDTA123YCA	SOT-23	PNP	200	-500	-50	56	-0.3	2.2	10	200	Fig.4
DTA113ZCA	SOT-23	PNP	200	-100	-50	33	-0.3	1	10	250	Fig.4
DTA114ECA	SOT-23	PNP	200	-100	-50	30	-0.3	10	10	250	Fig.4
DTA114EUA	SOT-323	PNP	200	-100	-50	30	-0.3	10	10	250	Fig.4
DTA114TCA	SOT-23	PNP	200	-100	-50	250	-0.3	10	∞	250	Fig.3
DTA114TUA	SOT-323	PNP	200	-100	-50	250	-0.3	10	∞	250	Fig.3
DTA114YCA	SOT-23	PNP	200	-100	-50	68	-0.3	10	47	250	Fig.4
DTA114YUA	SOT-323	PNP	200	-100	-50	68	-0.3	10	47	250	Fig.4
DTA123ECA	SOT-23	PNP	200	-100	-50	30	-0.3	2.2	2.2	250	Fig.4
DTA123JCA	SOT-23	PNP	200	-100	-50	80	-0.3	2.2	47	250	Fig.4
DTA123JUA	SOT-323	PNP	200	-100	-50	80	-0.3	2.2	47	250	Fig.4
DTA123YCA	SOT-23	PNP	200	-100	-50	33	-0.3	2.2	10	250	Fig.4
DTA123YUA	SOT-323	PNP	200	-100	-50	33	-0.3	2.2	10	250	Fig.4
DTA124ECA	SOT-23	PNP	200	-100	-50	56	-0.3	22	22	250	Fig.4
DTA124EUA	SOT-323	PNP	200	-100	-50	56	-0.3	22	22	250	Fig.4
DTA143ECA	SOT-23	PNP	200	-100	-50	30	-0.3	4.7	4.7	250	Fig.4
DTA143EUA	SOT-323	PNP	200	-100	-50	30	-0.3	4.7	4.7	250	Fig.4
DTA143XCA	SOT-23	PNP	200	-100	-50	30	-0.3	4.7	10	250	Fig.4
DTA143XUA	SOT-323	PNP	200	-100	-50	30	-0.3	4.7	10	250	Fig.4
DTA143ZCA	SOT-23	PNP	200	-100	-50	80	-0.3	4.7	47	250	Fig.4
DTA143ZUA	SOT-323	PNP	200	-100	-50	80	-0.3	4.7	47	250	Fig.4
DTA144ECA	SOT-23	PNP	200	-100	-50	68	-0.3	47	47	250	Fig.4
DTA144EUA	SOT-323	PNP	200	-100	-50	68	-0.3	47	47	250	Fig.4
EMH10	SOT-563	NPN*2	150	100	50	80	0.3	2.2	47	250	Fig.5
UMG2N	SOT-353	NPN*2	150	100	50	68	0.3	47	47	250	Fig.9
UMG8N	SOT-353	NPN*2	150	100	50	80	0.3	4.7	47	250	Fig.9
UMH10N	SOT-363	NPN*2	150	100	50	80	0.3	2.2	47	250	Fig.5
UMH11N	SOT-363	NPN*2	150	100	50	30	0.3	10	10	250	Fig.5
UMH13N	SOT-363	NPN*2	150	100	50	80	0.3	4.7	47	250	Fig.5
UMH1N	SOT-363	NPN*2	150	100	50	56	0.3	22	22	250	Fig.5
UMH2N	SOT-363	NPN*2	150	100	50	68	0.3	47	47	250	Fig.5
UMH3N	SOT-363	NPN*2	150	100	50	600	0.3	4.7	∞	250	Fig.11
UMH9N	SOT-363	NPN*2	150	100	50	68	0.3	10	47	250	Fig.5
UMB4N	SOT-363	PNP*2	150	-100	-50	100	-0.3	10	∞	250	Fig.13
UMD2N	SOT-363	NPN+PNP	150	100	50/-50	56	0.3/-0.3	22	22	250	Fig.6
UMD9N	SOT-363	NPN+PNP	150	100	50/-50	68	0.3/-0.3	10	47	250	Fig.6

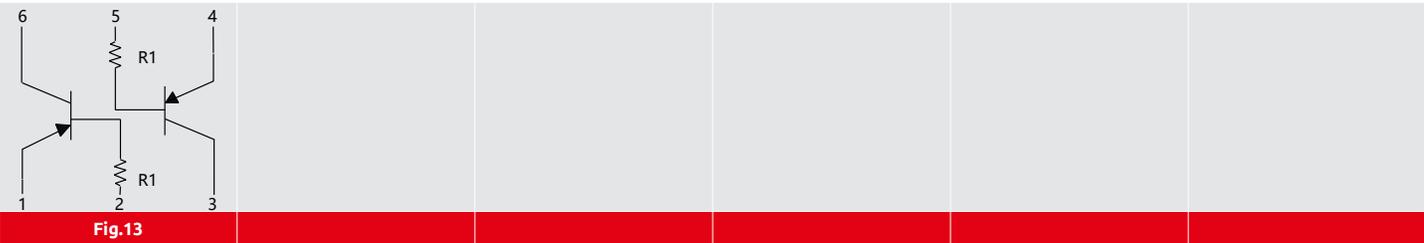
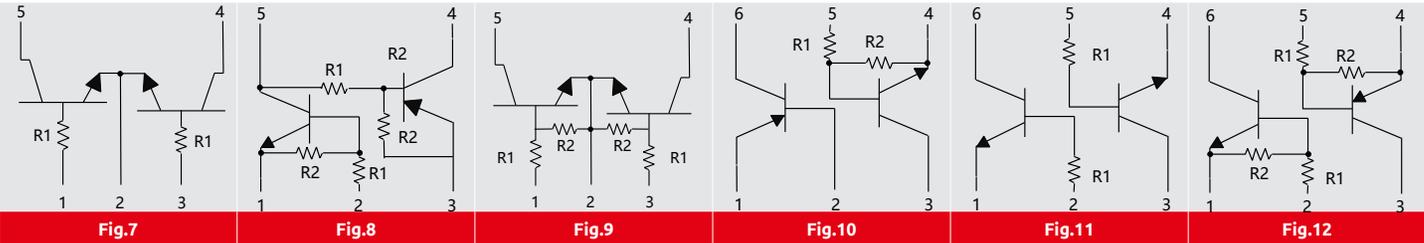
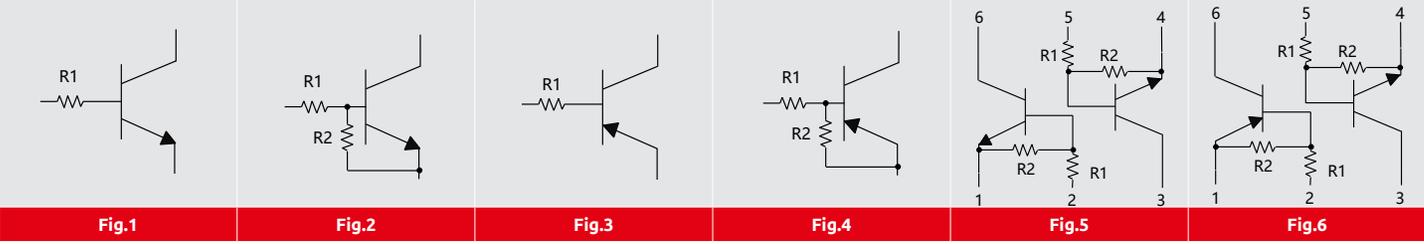
Pre-biased Transistors

Part Number	Package	Polarity	Power Dissipation	Output current	Supply Voltage	DC Current Gain	Output Voltage	Input Resistance		Transition frequency	Internal Structure
			P _o (mW)	I _o (mA)	V _{cc} (V)	G _i	V _o (V)	R _i (KΩ)	R ₂ (KΩ)	f _t (MHZ)	
UMD10N	SOT-363	NPN+PNP	150	100	50/-50	80	0.3/-0.3	2.2	47	250	Fig.6
UMD3N	SOT-363	NPN+PNP	150	100	50/-50	30	0.3/-0.3	10	10	250	Fig.6
UMC4N	SOT-353	NPN+PNP	150	100	50/-50	68	0.3/-0.3	47	47	250	Fig.8
UMD12N	SOT-363	NPN+PNP	150	100	50/-50	68	0.3/-0.3	47	47	250	Fig.6
UMD22N	SOT-363	NPN+PNP	150	100	50/-50	80	0.3/-0.3	4.7	47	250	Fig.6
UMC5N	SOT-353	NPN+PNP	150	100	50/-50	68	0.3/-0.3	47	47	250	Fig.8
UMD15N	SOT-363	NPN+PNP	150	100	50/-50	20	0.3/-0.3	4.7	4.7	250	Fig.6
EMD22	SOT-563	NPN+PNP	150	100	50/-50	80	0.3/-0.3	4.7	47	250	Fig.6
UMF21N	SOT-363	NPN+PNP	150	100	50	30	0.3	10	10	250	Fig.10



Transistors

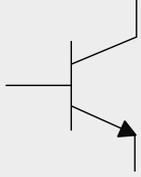
Internal Structure

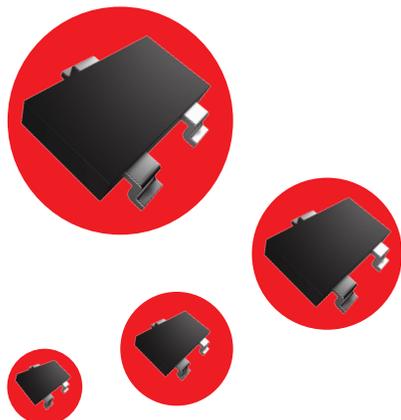


RF Bipolar Transistors

Part Number	Package	Polarity	Power Dissipation	Collector-Emitter Breakdown Voltage	Collector Current	DC Current Gain			Power Gain	Noise Figure	Transition Frequency	Internal Structure
			P_C (W)	V_{CEO} (V)	I_C (A)	H_{FE}	V_{CE} (V)	I_C (mA)	G_p (dB)	N_f (dB)	f_T (GHz)	
RF3356	SOT-23	NPN	0.15	12	0.1	130-300	10	20	12.5	2	7	Fig.1
RF3358	SOT-23	NPN	0.2	18	0.1	130-300	10	20	10	-	6	Fig.1

Internal Structure

											
Fig.1											



Voltage Regulators

- * 3.3~12V/100mA~1.5A popular volatge rating
- * SMD and through hole packages offer

Voltage Regulators	73
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<i>Voltage Regulators</i>	74
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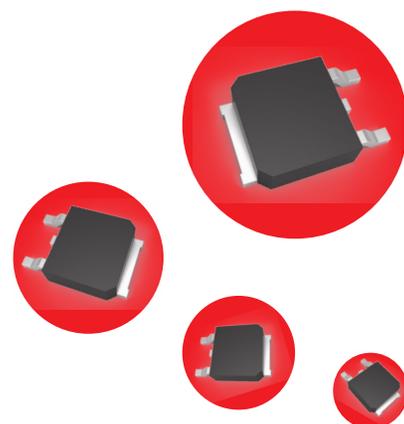
Voltage Regulators

Part Number	Package	Maximum Output Current	Output Voltage @ T _J = 25°C		Input Voltage		Line Regulation @ Input Voltage			Load Regulation @ V _I
		I _o (A)	V _o (V) Min	V _o (V) Max	V _i (V) Min	V _i (V) Max	ΔV _o (mV) Max	V _i (V) Min	V _i (V) Max	ΔV _o (mV) Max
MC78L05F	SOT-89	0.1	4.8	5.2	7	20	150	7	20	60
MC78L05FA	SOT-89	0.1	4.8	5.2	7	20	150	7	20	60
MC78L06F	SOT-89	0.1	5.75	6.25	8.5	20	175	8.5	20	80
MC78L08F	SOT-89	0.1	7.7	8.3	10.5	23	175	10.5	23	80
MC78L33F	SOT-89	0.1	3.168	3.432	7	20	150	5.8	20	60
MC79L05F	SOT-89	0.1	-4.8	-5.2	-7	-20	150	-20	-7	60
MC79L06F	SOT-89	0.1	-5.76	-6.24	-8.5	-20	150	-8.5	-20	60
MC79L08F	SOT-89	0.1	-7.68	-8.32	-10.5	-30	175	-10.5	-23	80
TL431AU	SOT-23	0.1	2.475	36	2.475	37	-	-	-	-
TL431BU	SOT-23	0.1	2.487	36	2.487	37	-	-	-	-
TL431K	SOT-23	0.1	2.482	36	2.482	37	-	-	-	-
TL431V	SOT-23	0.1	2.45	36	2.45	37	-	-	-	-
TL431X	SOT-89	0.1	2.44	36	2.44	2.55	-	-	-	-
MC78M05CDT	DPAK	0.5	4.8	5.2	7	20	100	7	25	100
MC78M06CDT	DPAK	0.5	5.75	6.25	8	21	100	8	25	120
MC78M08CDT	DPAK	0.5	7.7	8.3	10.5	23	100	11	25	160
MC78M12CDT	DPAK	0.5	11.5	12.5	14.5	27	100	14.5	30	240
MC78M15CDT	DPAK	0.5	14.25	15.75	17.5	30	100	17.5	30	300
MCA1117C-1.8	SOT-89	0.8	1.764	1.836	3.3	12	7	3.3	12	12
MCA1117C-2.5	SOT-89	0.8	2.45	2.55	4	12	7	4	12	16
MCA1117C-3.3	SOT-89	0.8	3.234	3.366	4.8	12	7	4.8	12	24
MCA1117C-5.0	SOT-89	0.8	4.9	5.1	6.5	12	10	6.5	12	36
MCA1117C-ADJ	SOT-89	0.8	1.225	1.275	2.75	12	10	2.75	12	8
MC7806CT	TO-220	1	5.88	6.12	8	21	120	8	25	120
MC7808CT	TO-220	1	7.84	8.16	10.5	23	160	10.5	25	160
MC78D05CDT	DPAK	1	4.8	5.2	8	20	100	7.5	20	100
MC7905CT	TO-220	1	-4.8	-5.2	-7	-20	50	-7	-25	100
MC7906CT	TO-220	1	-5.75	-6.25	-8	-21	160	-8	-25	160
MC7908CT	TO-220	1	-7.7	-8.3	-10.5	-23	160	-10.5	-25	160
MCT1117B-1.8	SOT-223	1	1.764	1.836	3.3	12	7	1.5	10.2	7.2
MCT1117B-2.5	SOT-223	1	2.45	2.55	4	12	7	1.5	9.5	10
MCT1117B-3.3	SOT-223	1	3.234	3.366	4.8	12	7	1.5	8.7	13.2
MCT1117B-5.0	SOT-223	1	4.9	5.1	6.5	12	10	1.5	7	20
MCT1117B-ADJ	SOT-223	1	1.225	1.275	2.75	13.25	10	1.5	12	20
LM317DT	D2-PAK	1.5	1.2	37	3	40	160	3	40	70
LM317MDT	DPAK	1.5	1.2	37	3	40	160	3	40	70
LM317T	TO-220	1.5	1.2	37	3	40	-	3	40	70
MC7805CT	TO-220	1.5	4.8	5.2	7	20	100	7	25	100
MC7805FCT	TO-220F	1.5	4.8	5.2	7	20	100	7	25	100
MC7815CT	TO-220	1.5	14.4	15.6	17.5	30	300	17.5	30	300
MC78M05CT	D2-PAK	1.5	4.8	5.2	7	20	100	7	25	100
MC78M12CT	D2-PAK	1.5	11.5	12.5	14.5	27	240	14.5	30	240
MC7915CT	TO-220	1.5	-14.4	-15.6	-17.5	-30	100	-17.5	-30	200
MC79D05CDT	DPAK	1.5	-4.75	-5.25	-7	-20	100	-7	-25	100

Voltage Regulators

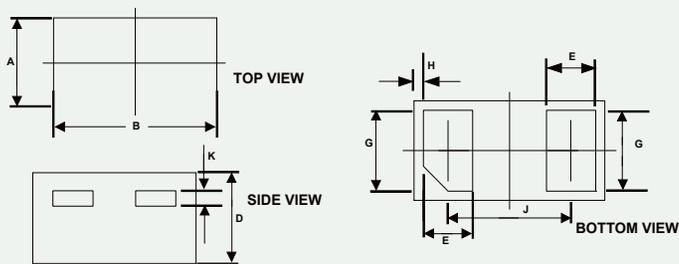
Voltage Regulators

Part Number	Package	Maximum Output Current	Output Voltage @ $T_J = 25^\circ\text{C}$		Input Voltage		Line Regulation @ Input Voltage			Load Regulation @ V_I
			I_o (A)	V_o (V) Min	V_o (V) Max	V_i (V) Min	V_i (V) Max	ΔV_o (mV) Max	V_i (V) Min	V_i (V) Max
MC79D15CDT	DPAK	1.5	-14.25	-15.75	-17.5	-30	100	-17.5	-30	200



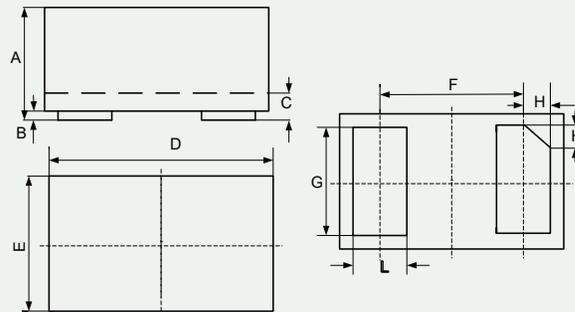
Package Outline

0201



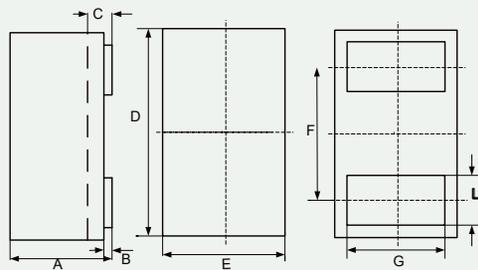
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.011	0.015	0.270	0.370	
B	0.022	0.026	0.570	0.670	
D	0.011	0.013	0.275	0.340	
E	0.005	0.008	0.125	0.195	
G	0.009	0.012	0.225	0.295	
H	0.001		0.030		REF.
J	0.014	0.017	0.365	0.435	
K	0.002		0.050		REF.

0201-A



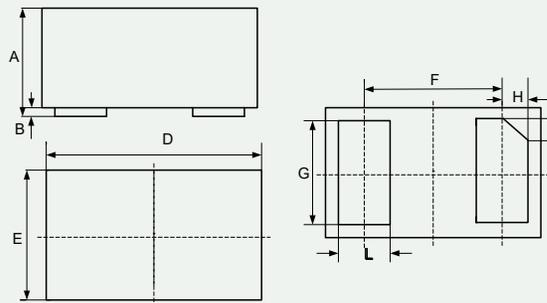
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.009	0.013	0.23	0.33	
B	0.000	0.002	0.00	0.05	
C	0.005	0.007	0.12	0.18	
D	0.022	0.026	0.55	0.65	
E	0.010	0.014	0.25	0.35	
F	0.014		0.355		REF.
G	0.008	0.011	0.215	0.275	
H	0.003		0.079		REF.
L	0.006	0.009	0.16	0.22	

CSP0201



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.008	0.013	0.21	0.33	
B	0.000	0.002	0.00	0.05	
C	0.005	0.007	0.12	0.18	
D	0.022	0.026	0.55	0.65	
E	0.010	0.014	0.25	0.35	
F	0.014		0.355		TYP.
G	0.008	0.011	0.215	0.28	
L	0.006	0.009	0.16	0.22	

DFN1006-2



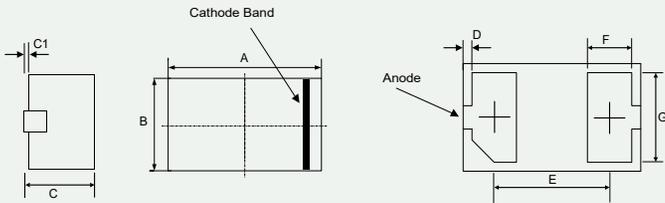
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.013	0.022	0.34	0.55	
B	0.000	0.002	0.00	0.05	
D	0.037	0.043	0.95	1.08	
E	0.022	0.027	0.55	0.68	
F	0.026		0.650		REF.
G	0.016	0.024	0.40	0.60	
H	0.003	0.007	0.07	0.17	
L	0.008	0.012	0.20	0.30	

Package Outline

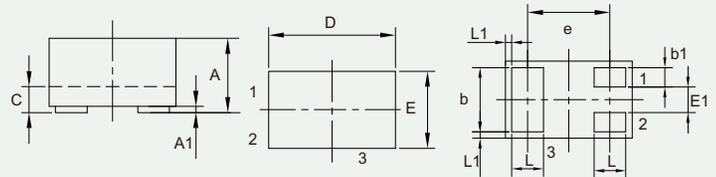
Package Outline

DFN1006-2L

DFN1006-3



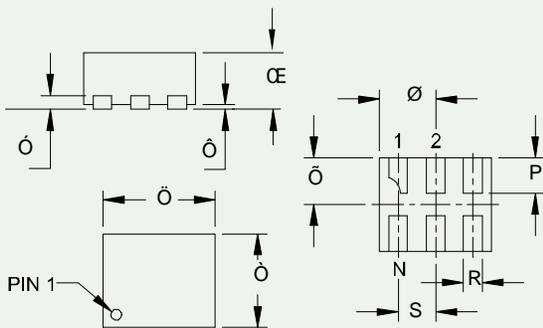
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.022	0.026	0.55	0.65	
C	0.016	0.020	0.40	0.50	
C1	-----	0.002	-----	0.05	
D	0.0004	0.004	0.01	0.09	
E	0.026		0.65		TYP.
F	0.008	0.012	0.20	0.30	
G	0.018	0.022	0.45	0.55	



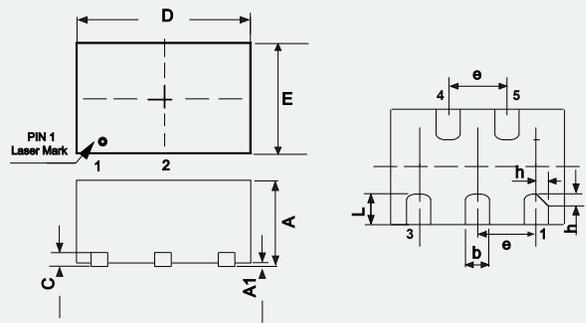
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
A1	0.000	0.002	0.00	0.05	
b	0.018	0.022	0.45	0.55	
b1	0.004	0.008	0.10	0.20	
c	0.005	0.007	0.12	0.18	
D	0.037	0.042	0.95	1.075	
E	0.022	0.026	0.55	0.675	
E1	0.006	0.010	0.15	0.25	
e	0.026		0.65		TYP.
L	0.008	0.012	0.20	0.30	
L1	0.0002		0.05		TYP.

DFN1210-6

DFN1308-5



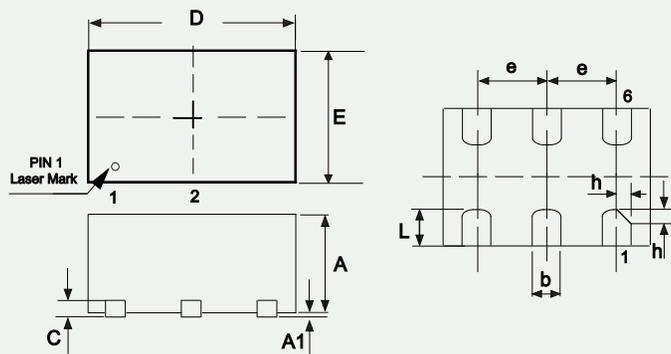
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.020	0.026	0.50	0.65	
B	0.005		0.13		TYP.
C	0.000	0.002	0.00	0.05	
D	0.043	0.051	1.10	1.30	
E	0.035	0.043	0.90	1.10	
F	0.022	0.026	0.55	0.65	
G	0.018	0.022	0.45	0.55	
H	0.012	0.017	0.30	0.425	
J	0.006	0.010	0.15	0.25	
K	0.16		0.40		TYP.



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.015	0.020	0.40	0.50	
A1	0.000	0.002	0.00	0.05	
b	0.006	0.010	0.15	0.25	
C	0.005		0.127		TYP.
D	0.047	0.056	1.20	1.40	
E	0.028	0.036	0.70	0.90	
e	0.020		0.50		TYP.
h	0.004	0.006	0.10	0.15	
L	0.008	0.012	0.20	0.30	

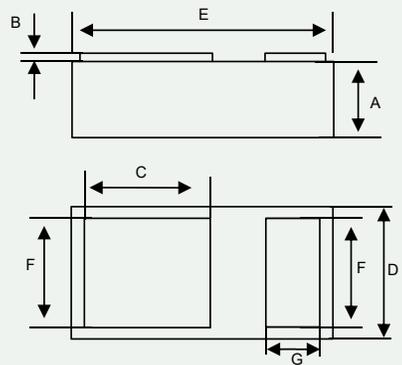
Package Outline

DFN1510-6



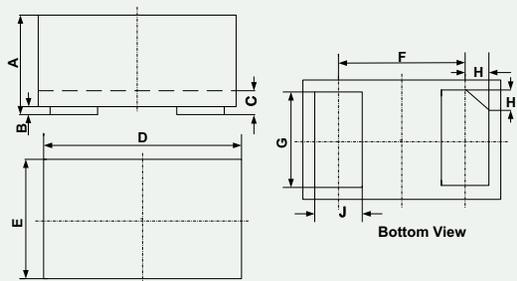
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.020	0.024	0.50	0.60	
A1	0.000	0.002	0.00	0.05	
b	0.006	0.010	0.15	0.25	
C	0.006		0.15		TYP.
D	0.055	0.063	1.40	1.60	
E	0.035	0.043	0.90	1.10	
e	0.020		0.50		TYP.
h	0.004	0.006	0.10	0.15	
L	0.014	0.018	0.35	0.45	

DFN1608-2L



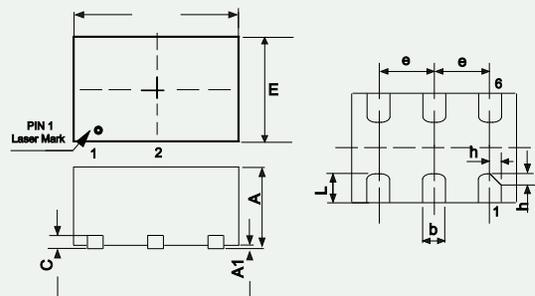
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.47	0.55	
B	0.000	0.002	0.00	0.05	
C	0.031	0.035	0.80	0.90	
D	0.030	0.033	0.75	0.85	
E	0.061	0.065	1.55	1.65	
F	0.022	0.026	0.55	0.65	
G	0.005	0.009	0.13	0.23	

DFN1610-2



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
B	0.000	0.002	0.00	0.05	
C	0.004	0.008	0.10	0.20	
D	0.062	0.066	1.55	1.65	
E	0.038	0.042	0.95	1.05	
F	0.044		1.10		TYP.
G	0.030	0.034	0.75	0.85	
H	0.006	0.010	0.15	0.25	
J	0.014	0.018	0.35	0.45	

DFN1610-6

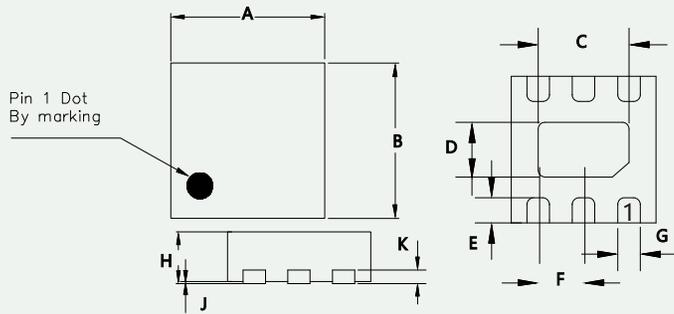


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.028	0.032	0.70	0.80	
A1	0.000	0.002	0.00	0.05	
b	0.006	0.010	0.17	0.25	
c	0.006	0.010	0.15	0.25	
D	0.061	0.065	1.55	1.65	
E	0.035	0.043	0.90	1.10	
L	0.008	0.012	0.20	0.30	
e	0.020		0.50		TYP.
h	0.003	0.005	0.08	0.12	

Package Outline

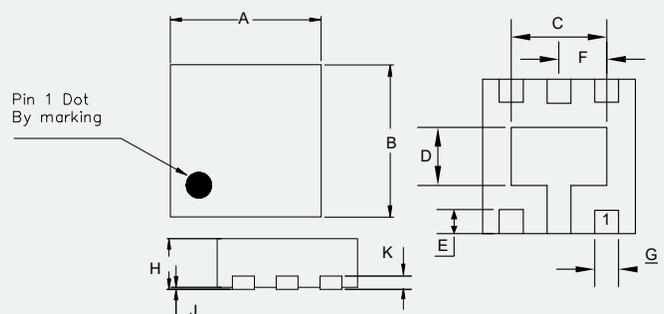
Package Outline

DFN1616-6



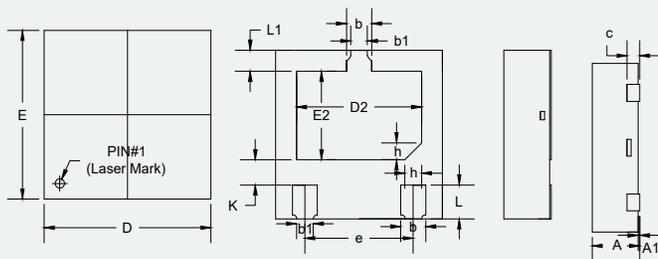
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.061	0.065	1.55	1.65	
B	0.061	0.065	1.55	1.65	
C	0.035	0.041	0.90	1.05	
D	0.020	0.026	0.50	0.65	
E	0.008	0.012	0.20	0.30	
F	0.020		0.50		TYP.
G	0.008	0.012	0.20	0.30	
H	0.020	0.024	0.50	0.60	
J	0.000	0.002	0.00	0.05	
K	0.006		0.15		TYP.

DFN1616-6L



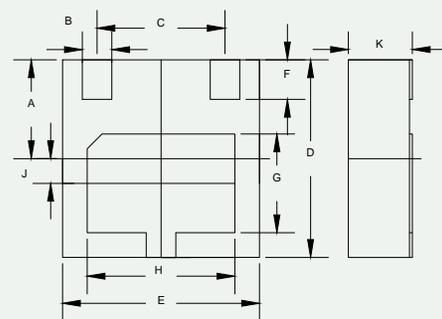
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.061	0.065	1.55	1.65	
B	0.061	0.065	1.55	1.65	
C	0.034	0.043	0.85	1.10	
D	0.018	0.028	0.45	0.70	
E	0.008	0.012	0.20	0.30	
F	0.020		0.50		TYP.
G	0.008	0.012	0.20	0.30	
H	0.020	0.024	0.50	0.60	
J	0.000	0.002	0.00	0.05	
K	0.006		0.15		TYP.

DFN2020-3A



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.020	0.024	0.50	0.60	
A1	0.000	0.002	0.00	0.05	
b	0.010	0.014	0.25	0.35	
b1	0.008		0.20		TYP.
c	0.006		0.15		TYP.
D	0.075	0.083	1.90	2.10	
D2	0.055	0.063	1.40	1.60	
e	0.051		1.30		TYP.
E	0.075	0.083	1.90	2.10	
E2	0.037	0.045	0.95	1.15	
L	0.014	0.018	0.35	0.45	
L1	0.008	0.012	0.20	0.30	
h	0.008		0.20		TYP.
K	0.008	0.016	0.20	0.40	

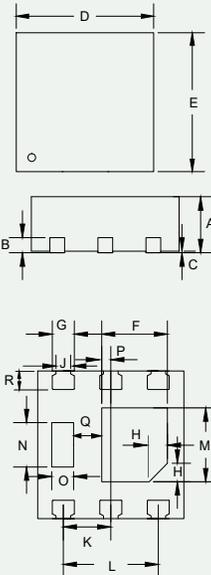
DFN2020-3L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.950	1.050	
B	0.010	0.014	0.250	0.350	
C	0.051		1.30		TYP.
D	0.075	0.083	1.900	2.100	
E	0.075	0.083	1.900	2.100	
F	0.014	0.018	0.350	0.450	
G	0.035	0.043	0.900	1.100	
H	0.055	0.063	1.400	1.600	
J	0.008	0.012	0.200	0.300	
K	-	0.026	-	0.650	

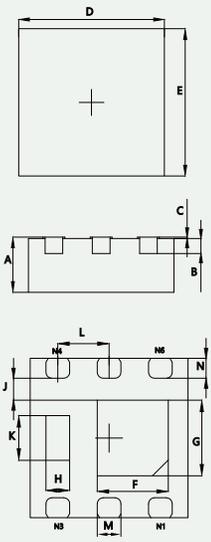
Package Outline

DFN2020-6G



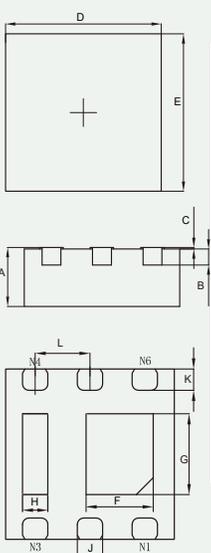
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.028	0.032	0.700	0.800	
B	0.008		0.203		TYP.
C	0.000	0.002	0.000	0.050	
D	0.075	0.083	1.900	2.100	
E	0.075	0.083	1.900	2.100	
F	0.033	0.037	0.850	0.950	
G	0.010	0.014	0.250	0.350	
H	0.010		0.250		TYP.
J	0.008		0.250		TYP.
K	0.026		0.650		TYP.
L	0.051		1.300		TYP.
M	0.037	0.041	0.950	1.050	
N	0.022	0.026	0.550	0.650	
O	0.010	0.014	0.250	0.350	
P	0.003	0.007	0.080	0.180	
Q	0.013	0.017	0.330	0.430	
R	0.008	0.012	0.200	0.300	

DFN2020-6J



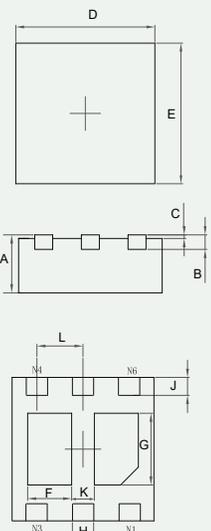
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.028	0.032	0.700	0.800	
B	0.008		0.203		TYP.
C	0.000	0.002	0.000	0.050	
D	0.076	0.082	1.924	2.076	
E	0.076	0.082	1.924	2.076	
F	0.031	0.039	0.800	1.000	
G	0.033	0.041	0.850	1.050	
H	0.008	0.016	0.200	0.400	
J	0.008	-----	0.200	-----	
K	0.018	0.026	0.460	0.660	
L	0.026		0.650		TYP.
M	0.010	0.014	0.250	0.350	
N	0.007	0.013	0.174	0.326	

DFN2020-6JA



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.028	0.032	0.700	0.800	
B	0.006		0.150		REF.
C	0.000	0.002	0.000	0.050	
D	0.077	0.081	1.950	2.050	
E	0.077	0.081	1.950	2.050	
F	0.024	0.031	0.610	0.810	
G	0.028	0.036	0.710	0.910	
H	0.008	0.016	0.200	0.400	
J	0.010	0.014	0.250	0.350	
K	0.008	0.012	0.200	0.300	
L	0.026		0.650		TYP.

DFN2020-6L



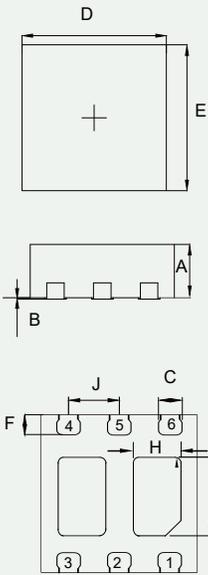
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.030	0.034	0.750	0.850	
B	0.008		0.200		TYP.
C	0.000	0.002	0.000	0.050	
D	0.077	0.081	1.950	2.050	
E	0.077	0.081	1.950	2.050	
F	0.017	0.027	0.440	0.690	
G	0.033	0.043	0.840	1.090	
H	0.010	0.014	0.250	0.350	
J	0.007	0.015	0.175	0.375	
K	0.010	0.014	0.250	0.350	
L	0.026		0.650		TYP.

Package Outline

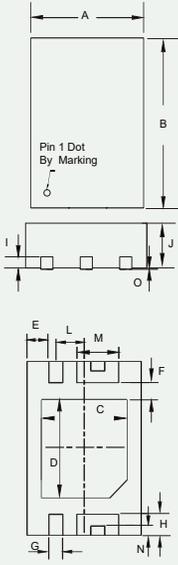
Package Outline

DFN2020-6LA

DFN2030-6L



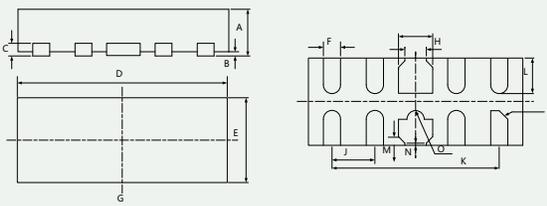
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.016	0.024	0.400	0.600	
B	0.000	0.002	0.000	0.050	
C	0.039	0.014	0.250	0.350	
D	0.075	0.083	1.900	2.100	
E	0.075	0.083	1.900	2.100	
F	0.006	0.014	0.150	0.350	
G	0.035	0.043	0.890	1.090	
H	0.019	0.027	0.490	0.690	
J	0.026		0.650		BSC.



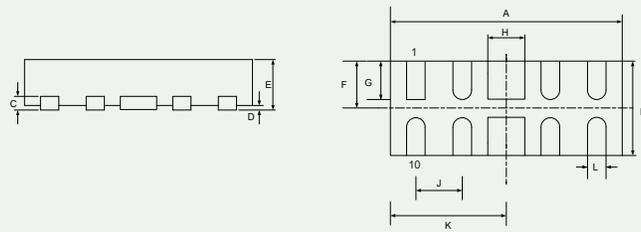
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.077	0.081	1.950	2.050	
B	0.116	0.120	2.950	3.050	
C	0.057	0.061	1.450	1.550	
D	0.065	0.069	1.650	1.750	
E	0.013	0.017	0.330	0.430	
F	0.008	0.012	0.200	0.300	
G	0.008	0.018	0.200	0.300	
H	0.014	0.012	0.350	0.450	
I	0.008		0.200		TYP.
J	0.030	0.033	0.750	0.850	
L	0.020		0.500		TYP.
M	0.028	0.031	0.700	0.800	
N	0.004	0.008	0.100	0.200	
O	0.000	0.002	0.000	0.050	

DFN2510-10

DFN-10



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
B	0.000	0.002	0.00	0.05	
C	0.004	0.008	0.10	0.20	
D	0.098	0.102	2.45	2.55	
E	0.038	0.042	0.95	1.05	
F	0.006	0.010	0.15	0.25	
G	0.014	0.018	0.35	0.45	
H	0.008	0.012	0.20	0.30	
J	0.020		0.500		TYP.
K	0.080		2.000		TYP.
L	0.014	0.018	0.35	0.45	
M	0.003		0.075		TYP.
N	0.002		0.050		TYP.
O	0.002	0.006	0.05	0.15	

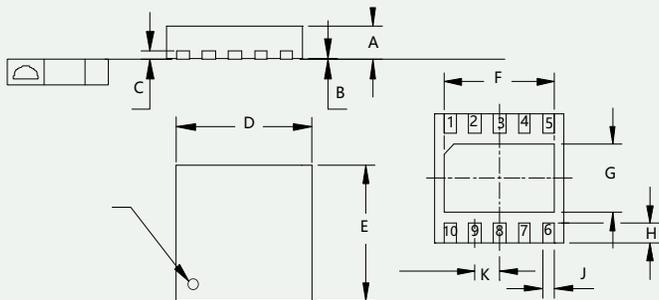


DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.094	0.102	2.40	2.60	
B	0.035	0.043	0.90	1.10	
C	0.005		0.13		TYP.
D	0.000	0.002	0.00	0.05	
E	0.020	0.026	0.50	0.65	
F	0.017	0.022	0.45	0.55	
G	0.012	0.017	0.30	0.425	
H	0.014	0.018	0.35	0.45	
J	0.020		0.50		TYP.
K	0.047	0.056	1.20	1.30	
L	0.006	0.010	0.15	0.25	

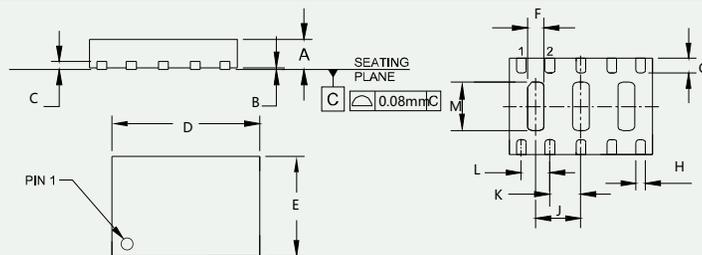
Package Outline

DFN2626-10

DFN3020-10



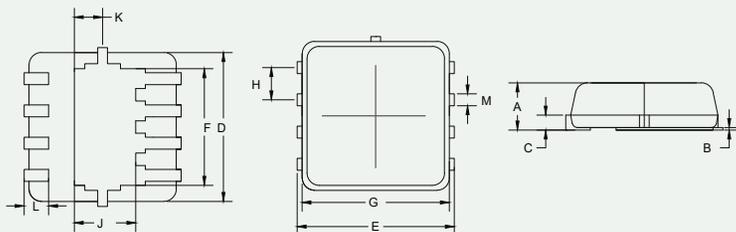
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.020	0.024	0.50	0.60	
B	0.000	0.002	0.00	0.05	
C	0.007		0.17		TYP.
D	0.098	0.106	2.50	2.70	
E	0.098	0.106	2.50	2.70	
F	0.079	0.089	2.00	2.25	
G	0.044	0.054	1.11	1.36	
H	0.012	0.016	0.30	0.40	
J	0.008	0.012	0.20	0.30	
K	0.020		0.50		TYP.



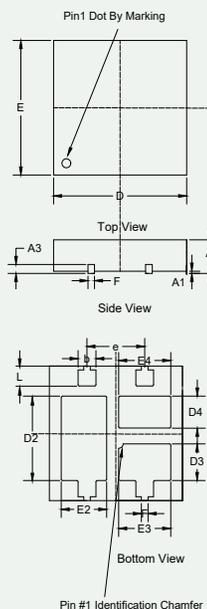
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.020	0.026	0.50	0.65	
B	0.000	0.002	0.00	0.05	
C	0.006		0.15		TYP.
D	0.114	0.122	2.90	3.10	
E	0.075	0.083	1.90	2.10	
F	0.010	0.018	0.25	0.45	
G	0.010	0.014	0.25	0.35	
H	0.006	0.010	0.15	0.25	
J	0.037		0.95		TYP.
K	0.020		0.65		TYP.
L	0.024		0.60		TYP.
M	0.037	0.041	0.95	1.05	

DFN3030

DFN3030-4L



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.028	0.035	0.70	0.90	
B	0.000	0.002	0.00	0.05	
C	0.004	0.010	0.10	0.25	
D	0.118		3.00		BSC
E	0.126		3.20		BSC
F	0.093		2.35		BSC
G	0.118		3.00		BSC
H	0.026		0.65		BSC
J	0.069		1.75		BSC
K	0.023		0.575		BSC
L	0.012	0.020	0.30	0.50	
M	0.009	0.014	0.24	0.35	

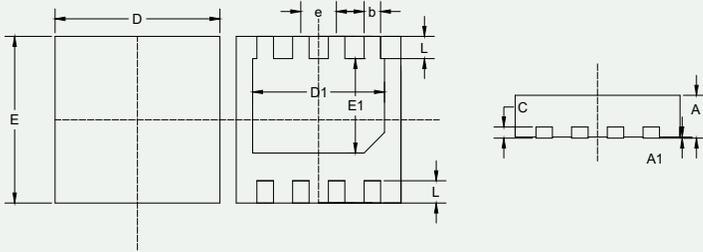


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.028	0.031	0.700	0.800	
A1	0.000	0.002	0.000	0.050	
A3	0.008		0.200		REF
D	0.116	0.120	2.950	3.050	
E	0.116	0.120	2.950	3.050	
D2	0.070	0.078	1.780	1.980	
E2	0.036	0.044	0.925	1.126	
D3	0.028	0.036	0.715	0.915	
E3	0.044	0.049	1.125	1.250	
D4	0.026	0.030	0.665	0.765	
E4	0.042	0.050	1.075	1.275	
b	0.014	0.018	0.350	0.450	
L	0.016	0.020	0.400	0.500	
e	0.051		1.300		BSC
F	0.006		0.150		REF

Package Outline

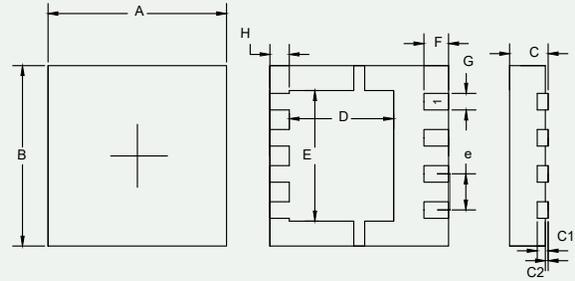
Package Outline

DFN3030-8



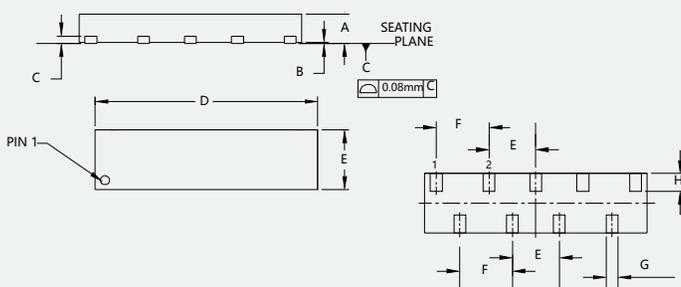
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.028	0.031	0.70	0.80	
A1	0.0008		0.02		TYP.
b	0.010	0.014	0.25	0.35	
c	0.007	0.012	0.18	0.30	
D	0.116	0.121	2.95	3.07	
E	0.116	0.121	2.95	3.07	
D1	0.091	0.098	2.30	2.50	
E1	0.063	0.071	1.60	1.80	
L	0.012	0.020	0.30	0.50	
e	0.026		0.65		TYP.

DFN3333



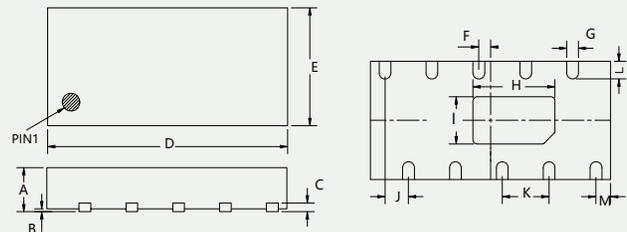
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.126	0.130	3.20	3.30	
B	0.126	0.130	3.20	3.30	
C	0.030	0.033	0.75	0.85	
C1	0.007	0.009	0.18	0.22	
C2	---	0.002	---	0.05	
D	0.071	0.079	1.80	2.00	
E	0.087	0.098	2.20	2.50	
F	0.016	0.020	0.40	0.50	
G	0.010	0.014	0.25	0.35	
H	0.012	0.016	0.30	0.40	
e	0.024	0.028	0.60	0.70	

DFN3810-9



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
B	0.000	0.002	0.00	0.05	
C	0.005		0.13		TYP.
D	0.146	0.154	3.70	3.90	
E	0.031		0.800		TYP.
F	0.035		0.900		TYP.
G	0.006	0.010	0.15	0.25	
H	0.010	0.014	0.25	0.35	

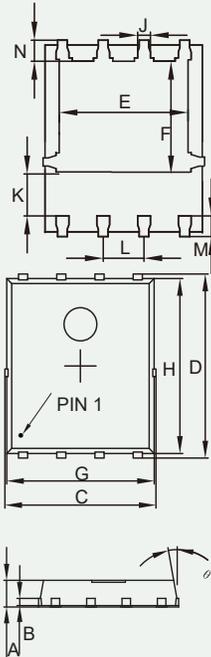
DFN4120-10



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.020	0.024	0.50	0.60	
B	0.000	0.002	0.00	0.05	
C	0.006		0.150		TYP.
D	0.162	0.166	4.05	4.15	
E	0.075	0.082	1.95	2.05	
F	0.008		0.200		TYP.
G	0.006	0.010	0.15	0.25	
H	0.050	0.060	1.25	1.50	
I	0.026	0.036	0.65	0.90	
J	0.016		0.40		TYP.
K	0.032		0.80		TYP.
L	0.008	0.016	0.20	0.40	
M	0.010		0.25		TYP.

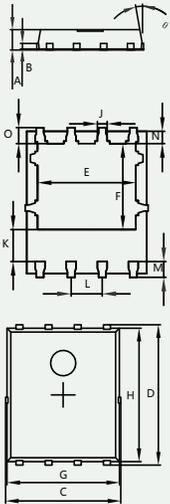
Package Outline

DFN5060



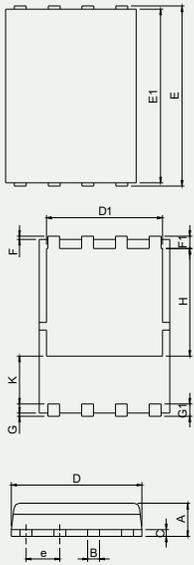
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.031	0.047	0.80	1.20	
B	0.010		0.254		TYP.
C	0.193	0.222	4.90	5.64	
D	0.232	0.250	5.90	6.35	
E	0.148	0.167	3.75	4.25	
F	0.126	0.154	3.20	3.92	
G	0.189	0.213	4.80	5.40	
H	0.222	0.239	5.65	6.06	
K	0.045	0.059	1.15	1.50	
J	0.012	0.020	0.30	0.50	
L	0.046	0.054	1.17	1.37	
M	0.012	0.028	0.30	0.71	
N	0.016	0.028	0.40	0.71	

DFN5060-8



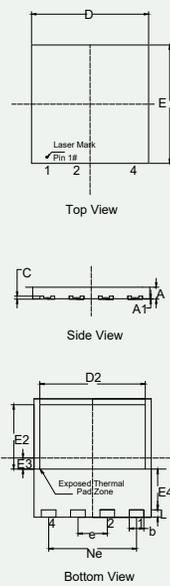
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.035	0.039	0.900	1.000	
B	0.010		0.254		TYP.
C	0.195	0.201	4.944	5.096	
D	0.235	0.241	5.974	6.126	
E	0.154	0.162	3.910	4.110	
F	0.133	0.141	3.375	3.575	
G	0.190	0.196	4.824	4.976	
H	0.223	0.229	5.674	5.826	
K	0.047	0.055	1.190	1.390	
J	0.014	0.018	0.350	0.450	
L	0.050		1.270		TYP.
M	0.022	0.028	0.559	0.711	
N	0.017	0.023	0.424	0.576	
O	0.023	0.029	0.574	0.726	
θ	10°	12°	10°	12°	

DFN5060-8L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.035	0.047	0.90	1.20	
B	0.012	0.020	0.30	0.51	
C	0.007	0.010	0.19	0.25	
D	0.189	0.209	4.80	5.30	
D1	0.157	0.173	4.00	4.40	
E	0.232	0.244	5.90	6.20	
E1	0.217	0.228	5.50	5.80	
e	0.050		1.27		TYP.
F	0.002	0.012	0.05	0.30	
F1	0.014	0.030	0.35	0.75	
G	0.002	0.012	0.05	0.30	
G1	0.014	0.030	0.35	0.75	
H	0.131	0.154	3.34	3.90	
K	0.030	-----	0.762	-----	

DFN8080



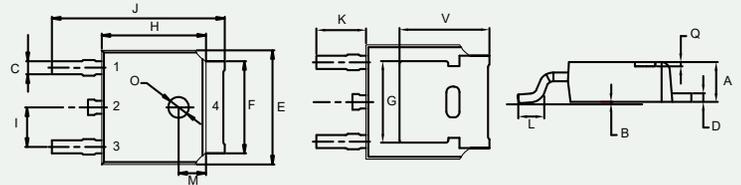
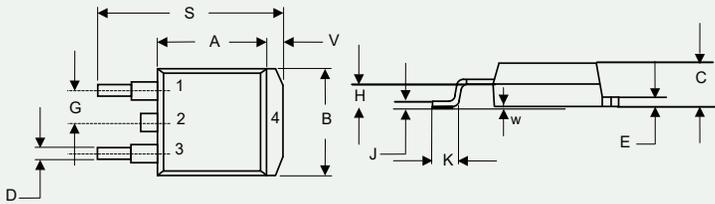
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.028	0.031	0.700	0.800	
A1	0.000	0.002	0.000	0.050	
b	0.037	0.041	0.950	1.050	
c	0.007	0.010	0.180	0.250	
D	0.311	0.319	7.900	8.100	
Ne	0.236		6.000		BSC
e	0.079		2.000		BSC
E	0.311	0.319	7.900	8.100	
D2	0.280	0.287	7.100	7.300	
E2	0.167	0.175	4.250	4.450	
E3	0.030		0.750		REF
E4	0.108		2.750		REF
L	0.018	0.022	0.450	0.550	

Package Outline

Package Outline

D2-PAK

DPAK

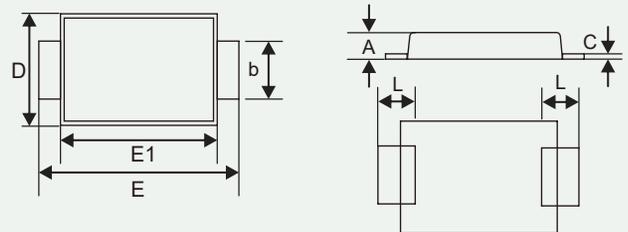
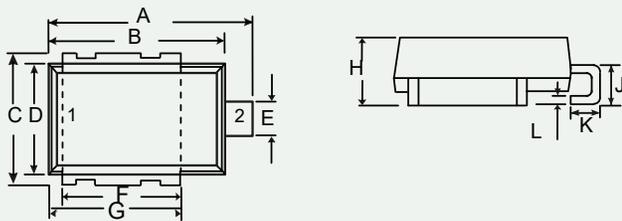


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.320	0.359	8.13	9.14	
B	0.374	0.453	9.50	11.50	
C	0.160	0.200	4.06	5.10	
D	0.020	0.038	0.51	0.96	
E	0.045	0.055	1.14	1.40	
G	0.083	0.110	2.10	2.80	
H	0.096	0.134	2.43	3.40	
J	0.011	0.025	0.28	0.64	
K	0.090	0.131	2.29	3.32	
S	0.575	0.652	14.22	16.55	
V	0.042	0.058	1.07	1.47	
W	0.000	0.008	0.00	0.20	

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.087	0.094	2.20	2.40	
B	0.000	0.005	0.00	0.13	
C	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
E	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.190		4.83		TYP.
H	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.114		2.90		TYP.
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		TYP.
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		TYP.

DO-218AB

DO-221AC

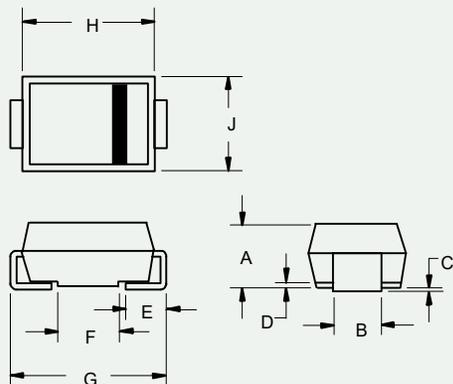


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.590	0.630	15.00	16.00	
B	0.524	0.539	13.30	13.70	
C	0.374	0.413	9.50	10.50	
D	0.323	0.339	8.20	8.60	
E	0.091	0.114	2.30	2.90	
F	0.343	0.366	8.70	9.30	
G	0.382	0.406	9.70	10.30	
H	0.189	0.205	4.80	5.20	
J	0.098	0.138	2.50	3.50	
K	0.067	0.106	1.70	2.70	
L	0.020	0.028	0.50	0.70	

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.035	0.049	0.90	1.25	
B	0.049	0.065	1.25	1.65	
C	0.004	0.016	0.10	0.40	
D	0.089	0.116	2.25	2.95	
E	0.173	0.220	4.40	5.60	
E1	0.126	0.181	3.20	4.60	
L	0.020	0.059	0.50	1.50	

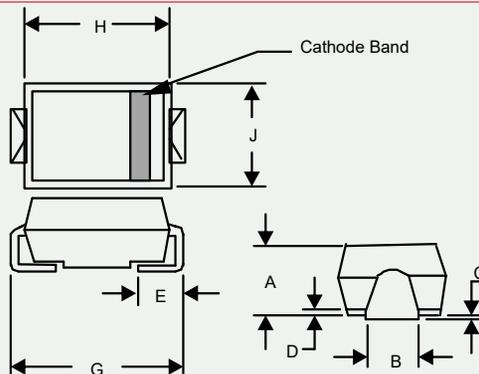
Package Outline

SMA



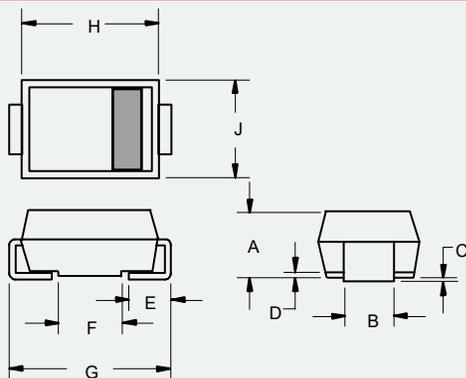
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.035	0.049	0.90	1.25	
B	0.049	0.065	1.25	1.65	
C	0.004	0.016	0.10	0.40	
D	0.089	0.116	2.25	2.95	
E	0.173	0.220	4.40	5.60	
E1	0.126	0.181	3.20	4.60	
L	0.020	0.059	0.50	1.50	

SMAE



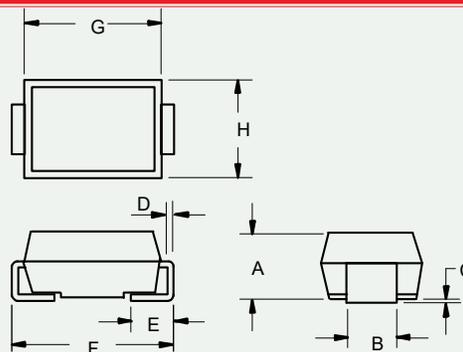
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.079	0.096	2.01	2.44	
B	0.045	0.071	1.15	1.80	
C	0.002	0.008	0.05	0.20	
D	---	0.020	---	0.51	
E	0.030	0.060	0.76	1.52	
F	0.065	0.084	1.65	2.13	
G	0.189	0.208	4.80	5.30	
H	0.157	0.180	4.00	4.57	
J	0.090	0.115	2.29	2.92	

SMB



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

SMC

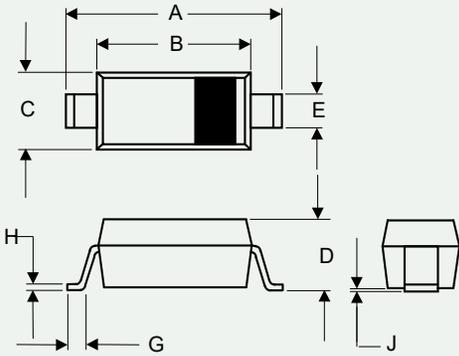


DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.108	0.128	2.75	3.25	
C	0.002	0.008	0.051	0.203	
D	0.006	0.012	0.152	0.305	
E	0.030	0.060	0.76	1.52	
F	0.305	0.320	7.75	8.13	
G	0.260	0.280	6.60	7.11	
H	0.220	0.245	5.59	6.22	

Package Outline

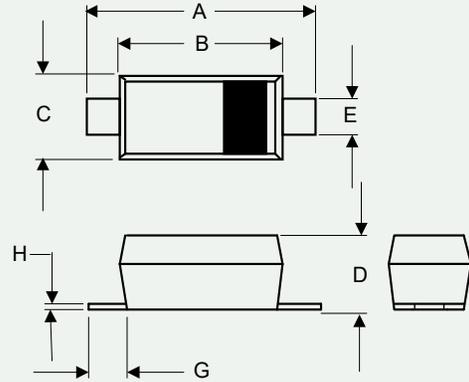
Package Outline

SOD-123



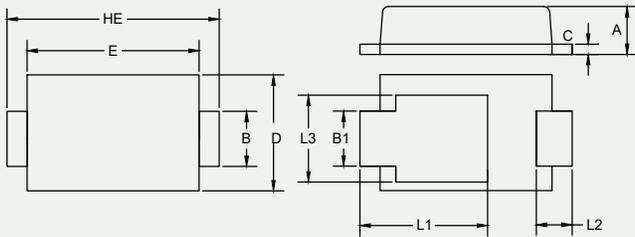
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.140	0.152	3.55	3.85	
B	0.100	0.112	2.55	2.85	
C	0.055	0.071	1.40	1.80	
D	----	0.053	----	1.35	
E	0.018	0.026	0.45	0.65	
G	0.006	----	0.15	----	
H	----	0.010	----	0.25	
J	----	0.006	----	0.15	

SOD-123FL



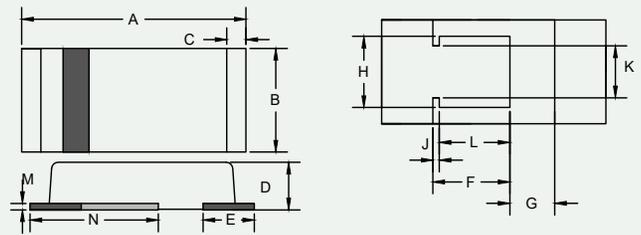
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.130	0.152	3.30	3.85	
B	0.100	0.122	2.55	3.10	
C	0.055	0.075	1.40	1.90	
D	0.035	0.053	0.90	1.35	
E	0.020	0.041	0.50	1.05	
G	0.010	----	0.25	----	
H	----	0.010	----	0.25	

SOD-123HE1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.030	0.035	0.75	0.90	
B	0.033	0.041	0.85	1.05	
B1	0.033	0.041	0.85	1.05	
C	0.004	0.010	0.10	0.25	
D	0.075	0.083	1.90	2.10	
E	0.114	0.122	2.90	3.10	
L1	0.079	0.096	2.00	2.45	
L2	0.016	0.033	0.40	0.85	
L3	0.051	0.067	1.30	1.70	
HE	0.138	0.154	3.50	3.90	

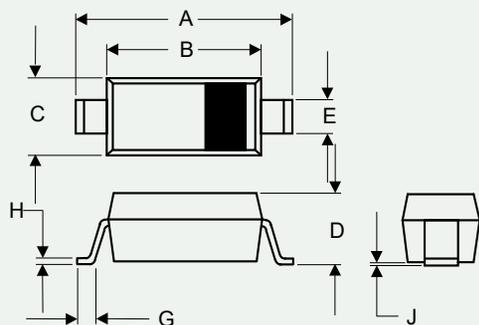
SOD-123HT



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.130	0.146	3.30	3.70	
B	0.055	0.071	1.40	1.80	
C	0.012		0.30		TYP.
D	0.024	0.039	0.60	1.00	
E	0.031		0.80		TYP.
F	0.043	0.051	1.10	1.30	
G	0.028	0.032	0.60	0.80	
H	0.039	0.047	1.00	1.20	
J	0.024		0.60		TYP.
K	0.030	0.034	0.75	0.85	
L	0.039	0.047	1.00	1.20	
M	0.004		0.10		TYP.
N	0.075	0.083	2.10	1.90	

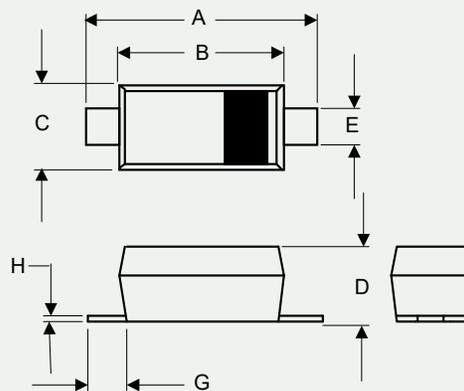
Package Outline

SOD-323



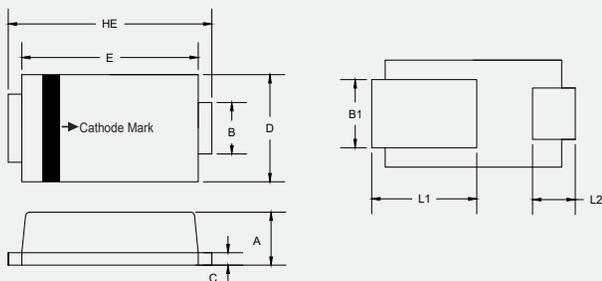
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	-----	0.006	-----	0.15	

SOD-323FL



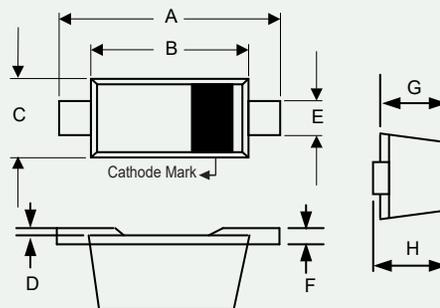
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.078	1.60	1.95	
C	0.045	0.053	1.15	1.35	
D	0.024	0.035	0.60	0.90	
E	0.010	0.016	0.25	0.40	
G	0.016		0.40		TYP.
H	0.002	0.008	0.05	0.21	

SOD-323HE



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.022	0.030	0.550	0.750	
B	0.021	0.029	0.530	0.730	
B1	0.028	0.036	0.720	0.920	
C	0.004	0.010	0.100	0.250	
D	0.047	0.055	1.200	1.400	
E	0.081	0.089	2.050	2.250	
L1	0.047	0.055	1.200	1.400	
L2	0.016	0.024	0.400	0.600	
HE	0.094	0.102	2.400	2.600	

SOD-523

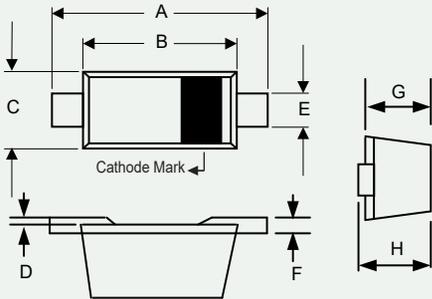


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.043	0.051	1.10	1.30	
C	0.030	0.033	0.75	0.85	
D	0.000	0.003	0.00	0.07	
E	0.010	0.014	0.25	0.35	
F	0.003	0.008	0.08	0.20	
G	0.020	0.026	0.50	0.65	
H	0.020	0.026	0.50	0.65	

Package Outline

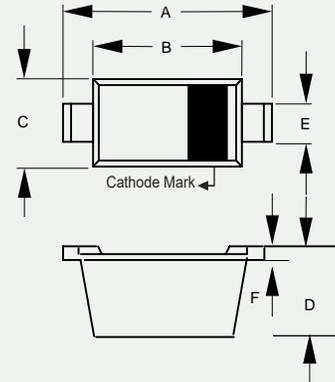
Package Outline

SOD-723



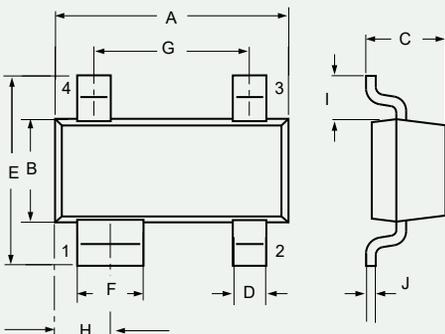
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.051	0.059	1.30	1.50	
B	0.035	0.043	0.90	1.10	
C	0.022	0.026	0.55	0.65	
D	0.001	0.003	0.01	0.07	
E	0.010	0.014	0.25	0.35	
F	0.003	0.006	0.08	0.15	
G	0.020	0.023	0.52	0.58	
H	0.021	0.026	0.53	0.65	

SOD-923



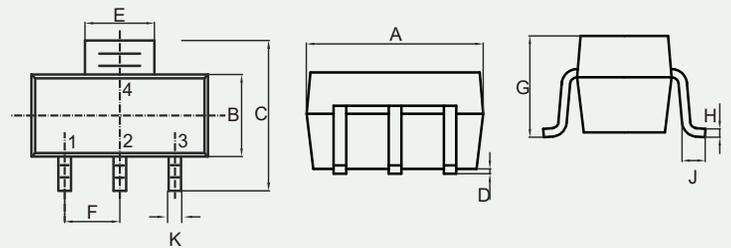
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.030	0.033	0.75	0.85	
C	0.022	0.026	0.55	0.65	
D	0.014	0.017	0.36	0.43	
E	0.006	0.010	0.15	0.25	
F	0.003	0.007	0.07	0.17	

SOT-143



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.047	0.055	1.20	1.39	
C	0.031	0.048	0.80	1.22	
D	0.011	0.020	0.30	0.51	
E	0.082	0.104	2.10	2.64	
F	0.029	0.037	0.76	0.94	
G	0.070	0.080	1.78	2.03	
H	0.028	0.033	0.72	0.83	
I	0.015	0.024	0.40	0.60	
J	0.003	0.008	0.08	0.20	

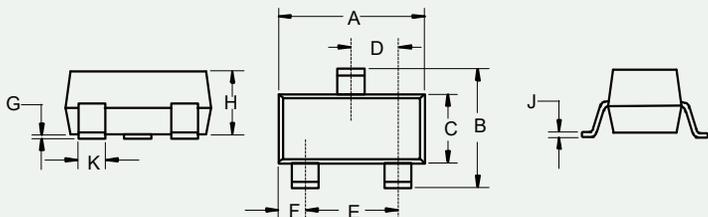
SOT-223



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.248	0.264	6.30	6.70	
B	0.130	0.146	3.30	3.70	
C	0.264	0.287	6.70	7.30	
D	0.001	0.004	0.02	0.10	
E	0.114	0.122	2.90	3.10	
F	0.091		2.30		TYP.
G	---	0.071	---	1.80	
H	0.009	0.014	0.23	0.35	
J	0.030	---	0.75	---	
K	0.026	0.033	0.66	0.84	

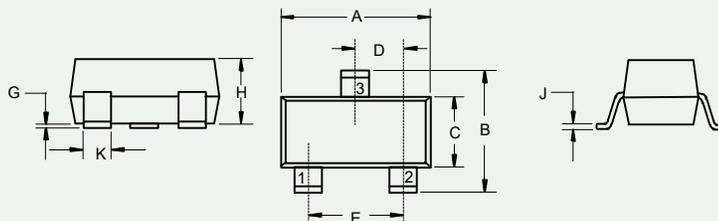
Package Outline

SOT-23



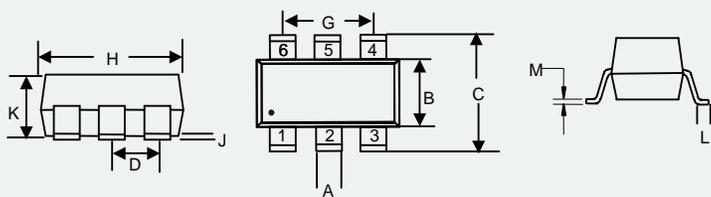
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.035	0.041	0.89	1.03	
E	0.070	0.081	1.78	2.05	
F	0.018	0.024	0.45	0.60	
G	0.0005	0.0039	0.01	0.10	
H	0.035	0.044	0.89	1.12	
J	0.003	0.007	0.085	0.180	
K	0.015	0.020	0.37	0.51	

SOT-23-3L



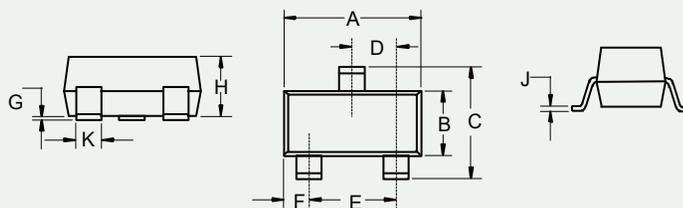
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.113	0.117	2.87	2.97	
B	0.108	0.112	2.75	2.85	
C	0.061	0.065	1.55	1.65	
D	0.036	0.038	0.914	0.965	
E	0.073	0.077	1.85	1.95	
G	0.0016	0.0039	0.04	0.100	
H	0.044	0.049	1.12	1.25	
J	0.006	0.007	0.14	0.17	
K	0.013	0.015	0.34	0.37	

SOT23-6L



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.012	0.020	0.30	0.50	
B	0.051	0.070	1.30	1.80	
C	0.087	0.126	2.20	3.20	
D	0.037		0.95		TYP.
G	0.074		1.90		TYP.
H	0.106	0.122	2.70	3.10	
J	0.002	0.006	0.05	0.15	
K	0.030	0.051	0.75	1.30	
L	0.012	0.024	0.30	0.60	
M	0.003	0.008	0.08	0.22	

SOT-323

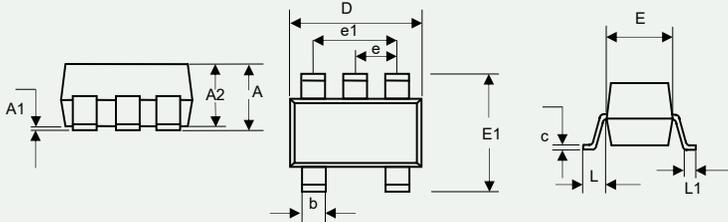


DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026		0.65		TYP.
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.044	0.90	1.10	
J	0.002	0.010	0.05	0.25	
K	0.006	0.016	0.15	0.40	

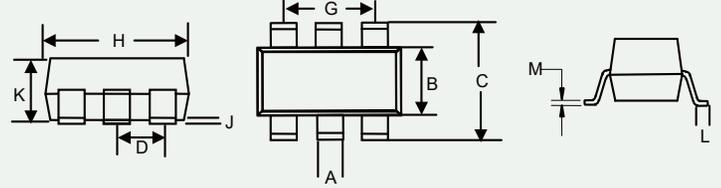
Package Outline

Package Outline

SOT-353 **SOT-363**

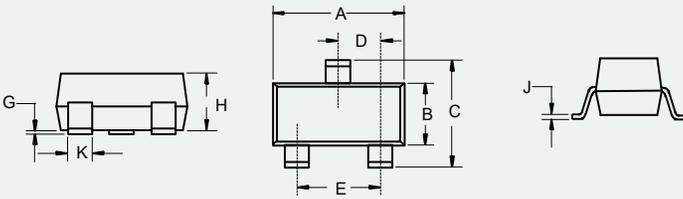


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.035	0.043	0.90	1.10	
A1	-----	0.004	-----	0.10	
A2	0.035	0.039	0.90	1.00	
b	0.006	0.014	0.15	0.35	
c	0.003	0.006	0.08	0.15	
D	0.790	0.087	2.00	2.20	
E	0.045	0.053	1.15	1.35	
E1	0.085	0.096	2.15	2.45	
e	0.026		0.650		TYP.
e1	0.047	0.055	1.20	1.40	
L	0.021		0.525		TYP.
L1	0.010	0.018	0.26	0.46	

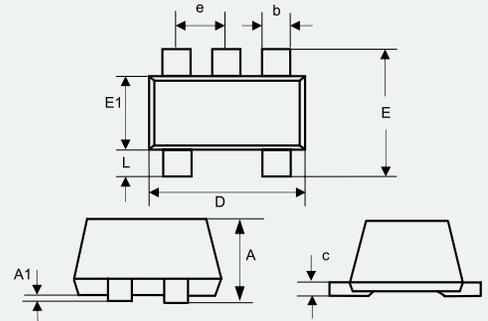


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.006	0.014	0.15	0.35	
B	0.045	0.053	1.15	1.35	
C	0.079	0.096	2.00	2.45	
D	0.026		0.65		TYP.
G	0.047	0.055	1.20	1.40	
H	0.071	0.087	1.80	2.20	
J	-----	0.004	-----	0.10	
K	0.031	0.043	0.80	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

SOT-523 **SOT-553**



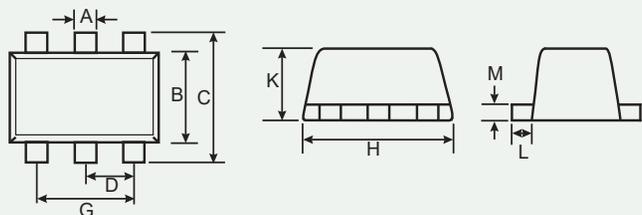
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.030	0.033	0.75	0.85	
C	0.057	0.069	1.45	1.75	
D	0.020		0.50		TYP.
E	0.035	0.043	0.90	1.10	
G	0.000	0.004	0.00	0.10	
H	0.028	0.031	0.70	0.80	
J	0.004	0.008	0.10	0.20	
K	0.006	0.014	0.15	0.35	



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.021	0.024	0.525	0.60	
A1	0.000	0.002	0.00	0.05	
e	0.018	0.022	0.45	0.55	
c	0.004	0.006	0.09	0.16	
D	0.059	0.067	1.50	1.70	
b	0.007	0.011	0.17	0.27	
E1	0.040	0.051	1.10	1.30	
E	0.059	0.067	1.50	1.70	
L	0.004	0.012	0.10	0.30	

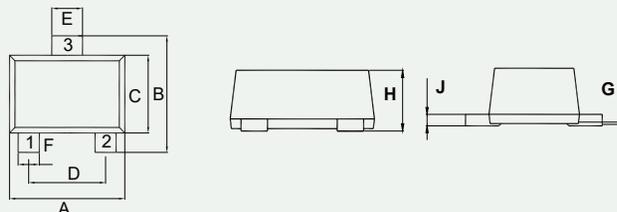
Package Outline

SOT-563



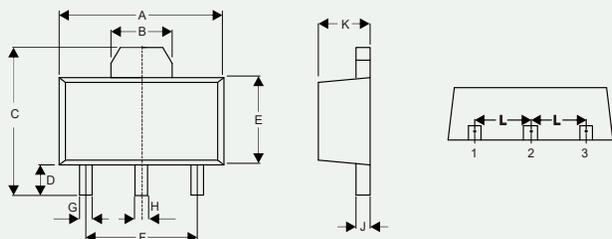
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.006	0.011	0.15	0.30	
B	0.043	0.051	1.10	1.30	
C	0.059	0.067	1.50	1.70	
D	0.020		0.50		TYP.
G	0.035	0.043	0.90	1.10	
H	0.059	0.067	1.50	1.70	
K	0.020	0.023	0.52	0.60	
L	0.004	0.011	0.10	0.30	
M	0.004	0.007	0.10	0.18	

SOT-723



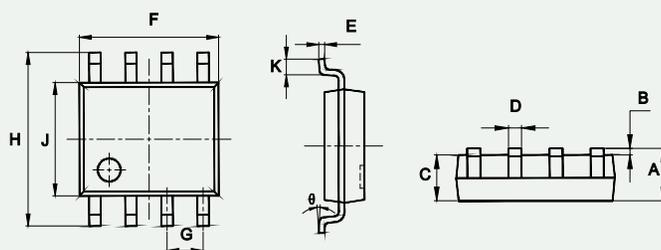
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.043	0.051	1.10	1.30	
B	0.043	0.051	1.10	1.30	
C	0.028	0.035	0.70	0.90	
D	0.031		0.80		TYP.
E	0.009	0.017	0.22	0.42	
F	0.005	0.013	0.12	0.32	
G	0.000	0.002	0.00	0.05	
H	0.017	0.021	0.43	0.54	
J	0.003	0.006	0.08	0.15	

SOT-89



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.169	0.185	4.30	4.70	
B	0.061		1.55		TYP.
C	0.154	0.171	3.91	4.35	
D	0.031	0.047	0.80	1.20	
E	0.089	0.104	2.25	2.65	
F	0.118		3.00		TYP.
G	0.013	0.020	0.33	0.52	
H	0.015	0.021	0.38	0.53	
J	0.014	0.017	0.35	0.44	
K	0.055	0.063	1.40	1.60	
L	0.059		1.50		TYP.

SOP-8

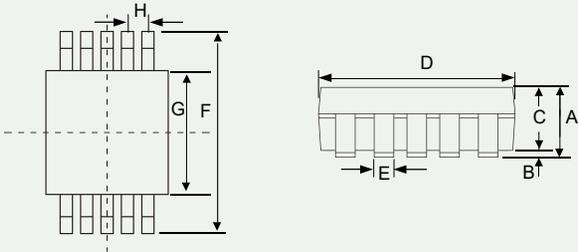


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.053	0.069	1.35	1.75	
B	0.004	0.010	0.10	0.25	
C	0.053	0.061	1.35	1.55	
D	0.013	0.020	0.33	0.51	
E	0.007	0.010	0.17	0.25	
F	0.185	0.200	4.70	5.10	
G	0.050		1.270		TYP.
H	0.228	0.244	5.80	6.20	
J	0.150	0.157	3.80	4.00	
K	0.016	0.050	0.40	1.27	
θ	0°	8°	0°	8°	

Package Outline

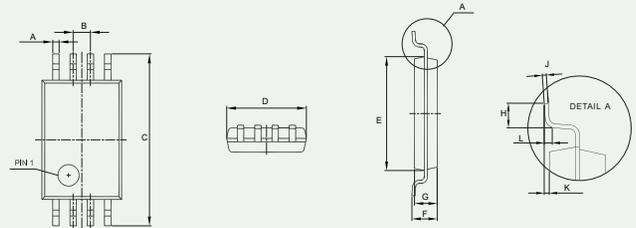
Package Outline

MSOP-10



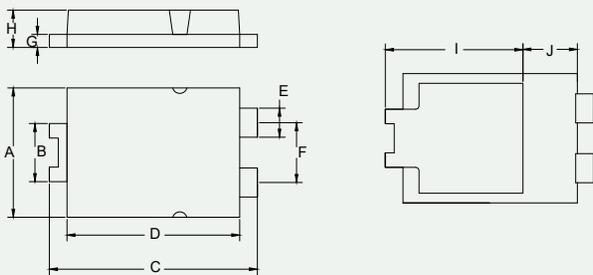
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	0.043	----	1.10	
B	0.000	0.006	0.00	0.15	
C	0.030	0.037	0.75	0.95	
D	0.114	0.122	2.90	3.10	
E	0.007	0.011	0.17	0.27	
F	0.193		4.90		TYP.
G	0.114	0.122	2.90	3.10	
H	0.020		0.50		

TSSOP-8



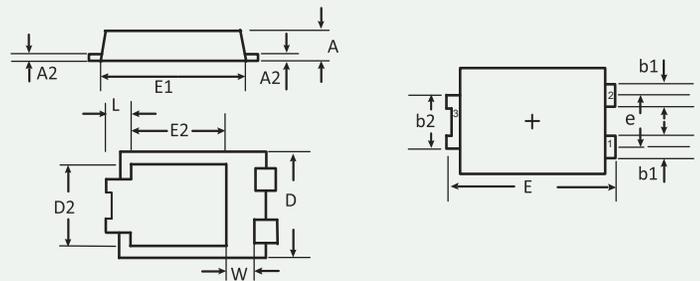
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.007	0.012	0.19	0.30	
B	0.026		0.65		TYP.
C	0.246	0.258	6.25	6.55	
D	0.114	0.122	2.90	3.10	
E	0.169	0.177	4.30	4.50	
F	---	0.047	---	1.20	
G	0.031	0.039	0.80	1.00	
H	0.020	0.028	0.50	0.70	
J	0.004	0.008	0.09	0.20	
K	0.002	0.006	0.05	0.15	
L	0.010		0.25		TYP.

TO-277



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.154	0.161	3.90	4.10	
B	0.067	0.075	1.70	1.90	
C	0.252	0.260	6.40	6.60	
D	0.209	0.217	5.30	5.50	
E	0.031	0.039	0.80	1.00	
F	0.071	0.075	1.80	1.90	
G	0.014	0.018	0.35	0.45	
H	0.043	0.047	1.10	1.20	
I	0.161	0.177	4.10	4.50	
J	0.059	0.075	1.50	1.90	

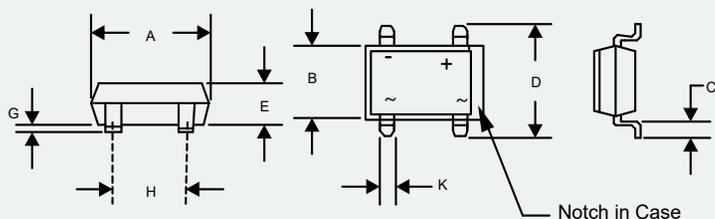
TO-277B



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.039	0.047	1.00	1.20	
A2	0.006	0.017	0.15	0.43	
b1	0.030	0.041	0.75	1.05	
b2	0.065	0.077	1.65	1.95	
D	0.148	0.169	3.75	4.30	
D2	0.110	0.126	2.80	3.20	
E	0.250	0.264	6.35	6.70	
e	0.065	0.077	1.65	1.95	
E1	0.207	0.228	5.25	5.80	
E2	0.120	0.142	3.05	3.60	
L	0.028	0.051	0.70	1.30	
W	0.031	0.056	0.80	1.42	

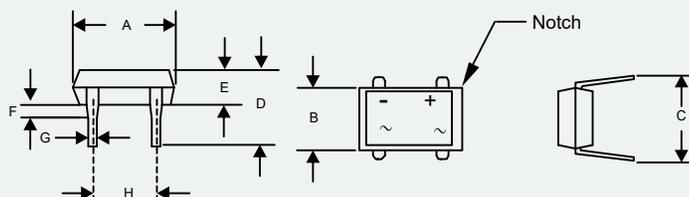
Package Outline

SDB-1



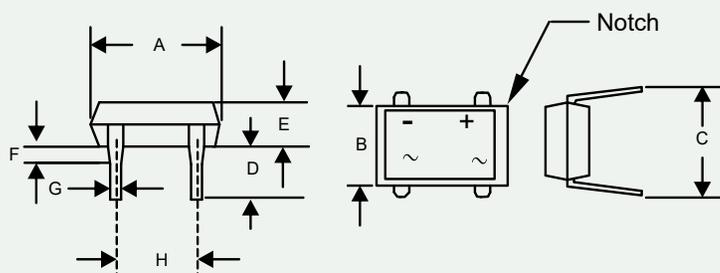
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.316	0.335	8.05	8.51	
B	0.245	0.255	6.20	6.50	
C	0.040	0.060	1.02	1.50	
D	0.360	0.410	9.40	10.40	
E	0.102	0.130	2.60	3.30	
G	0.003	0.013	0.076	0.33	
H	0.195	0.205	5.00	5.20	
K	0.038	0.047	1.00	1.20	

DB-1



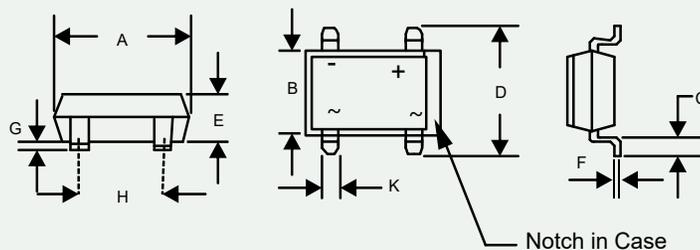
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.316	0.335	8.05	8.51	
B	0.245	0.255	6.20	6.50	
C	0.300	0.350	7.60	8.90	
D	0.236	0.299	6.01	7.60	
E	0.102	0.130	2.60	3.30	
F	0.060		1.50		TYP.
G	0.016	0.022	0.41	0.56	TYP.
H	0.195	0.205	5.00	5.20	

DBL-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.316	0.335	8.05	8.51	
B	0.245	0.255	6.20	6.50	
C	0.300	0.350	7.60	8.90	
D	0.150	0.185	3.81	4.69	
E	0.093	0.096	2.35	2.45	
F	0.050	0.080	1.27	2.03	
G	0.018	0.023	0.46	0.56	
H	0.195	0.205	5.00	5.20	

SDBL-1

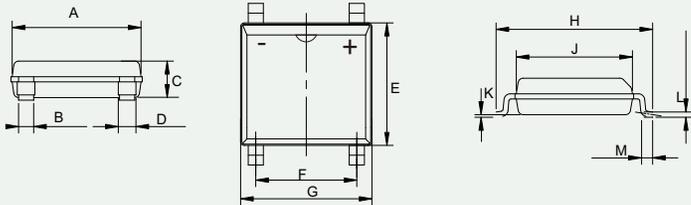


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.320	0.335	8.12	8.51	
B	0.244	0.256	6.20	6.50	
C	0.040	0.060	1.02	1.53	
D	0.366	0.413	9.30	10.50	
E	0.093	0.096	2.35	2.45	
F	0.006	0.013	0.15	0.33	
G	0.003	0.013	0.076	0.33	
H	0.195	0.205	5.00	5.20	
K	0.037	0.047	0.95	1.20	

Package Outline

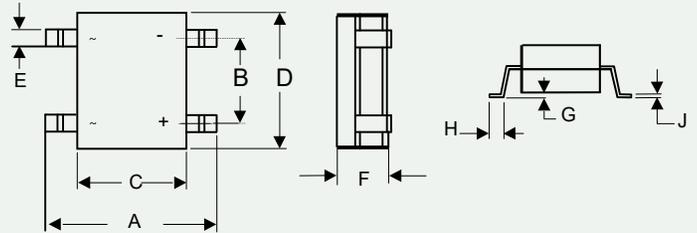
Package Outline

LMBS-1



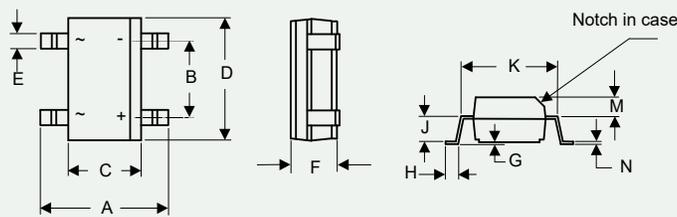
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.197	0.205	4.90	5.20	
B	0.024		0.60		
C	---	0.059	---	1.50	
D	0.024	0.032	0.60	0.80	
E	---	0.189	---	4.80	
F	0.150	0.165	3.80	4.20	
G	---	0.209	---	5.30	
H	0.236	0.252	6.00	6.60	
J	0.177	0.185	4.30	4.70	
K	0.0009	0.004	0.02	0.21	
L	0.006	0.012	0.15	0.30	
M	0.017	0.031	0.25	0.80	

MBLS-1



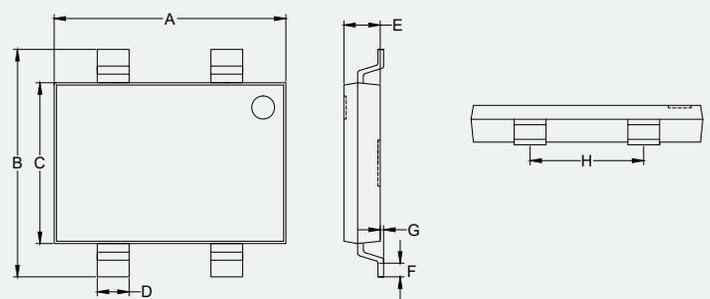
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.252	0.283	6.40	7.20	
B	0.087	0.102	2.20	2.60	
C	0.142	0.193	3.60	4.90	
D	0.177	0.200	4.55	5.10	
E	0.022	0.033	0.55	0.84	
F	0.045	0.063	1.15	1.60	
G	0.000	0.008	0.00	0.20	
H	0.016	0.043	0.40	1.10	
J	0.004	0.016	0.10	0.35	

MBS-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.252	0.276	6.40	7.00	
B	0.095	0.106	2.41	2.70	
C	0.142	0.165	3.60	4.20	
D	0.179	0.195	4.55	4.95	
E	0.019	0.031	0.50	0.80	
F	0.090	0.106	2.30	2.70	
G	0.002	0.008	0.05	0.20	
H	0.027	0.043	0.70	1.10	
J	0.058	0.062	1.47	1.57	
K	0.195	0.205	4.95	5.21	
M	0.039	0.049	0.99	1.24	
N	0.006	0.016	0.15	0.41	

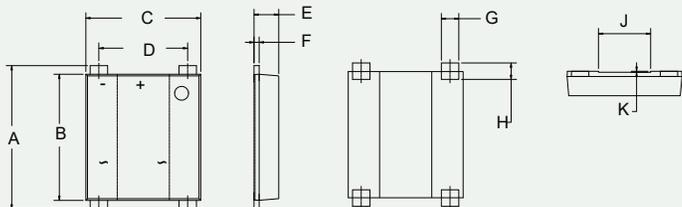
TBL



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.394	0.409	10.00	10.40	
B	0.382	0.398	9.70	10.10	
C	0.268	0.283	6.80	7.20	
D	0.051	0.059	1.30	1.50	
E	0.055	0.071	1.40	1.80	
F	0.020	0.043	0.50	1.10	
G	0.000	0.006	0.00	0.15	
H	0.193	0.201	4.90	5.10	

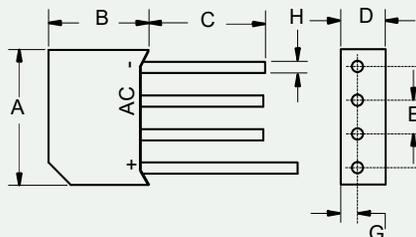
Package Outline

TBS



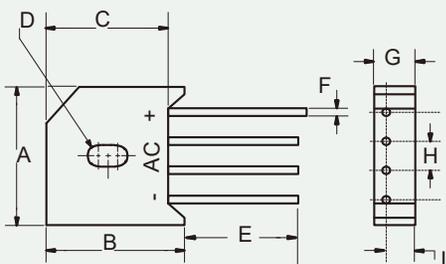
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.311	0.339	7.90	8.60	
B	0.283	0.291	7.20	7.40	
C	0.256	0.264	6.50	6.70	
D	0.197	0.205	5.00	5.20	
E	0.051	0.059	1.30	1.50	
F	0.011	0.016	0.27	0.40	
G	0.037	0.045	0.95	1.15	
H	0.028	0.041	0.70	1.05	
J	0.114	0.122	2.90	3.10	
K	0.0015	0.003	0.04	0.08	

RS-4L



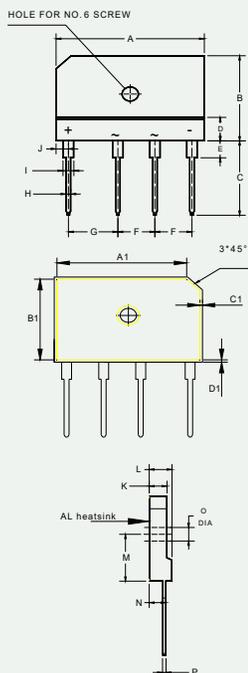
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.728	0.768	18.50	19.50	
B	0.600	0.640	15.20	16.30	
C	0.630	---	16.00	---	
D	0.217	0.256	5.50	6.50	
E	0.180	0.220	4.60	5.60	
G	---	0.083	---	2.10	
H	0.048	0.052	1.20	1.30	

RS-6



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.895	0.935	22.70	23.70	
B	---	0.760	---	19.30	
C	0.660	0.728	16.80	18.50	
D	0.150 X 0.23L		3.80 X 5.57L		HOLE
E	0.787	---	20.00	---	
F	0.048	0.052	1.20	1.30	
G	0.260	0.280	6.60	7.10	
H	0.180	0.220	4.60	5.60	
I	0.181	0.205	4.60	5.20	

PB

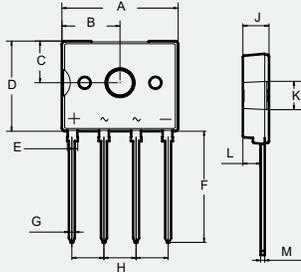


DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.169	1.193	29.70	30.30	
B	0.776	0.799	19.70	20.30	
C	0.669	0.709	17.00	18.00	
D	0.189	0.228	4.80	5.80	
E	0.150	0.165	3.80	4.20	
F	0.287	0.303	7.30	7.70	
G	0.386	0.402	9.80	10.20	
H	0.035	0.043	0.90	1.10	
I	0.079	0.094	2.00	2.40	
J	0.091	0.106	2.30	2.70	
K	0.134	0.150	3.40	3.80	
L	0.173	0.189	4.40	4.80	
M	0.425	0.441	10.80	11.20	
N	0.122	0.146	3.10	3.70	
O	0.122	0.134	3.10	3.40	
P	0.024	0.031	0.60	0.80	
A1	1.136	1.144	28.85	29.05	
B1	0.742	0.750	18.85	19.05	
C1	0.016	0.024	0.40	0.60	
D1	0.016	0.024	0.40	0.60	

Package Outline

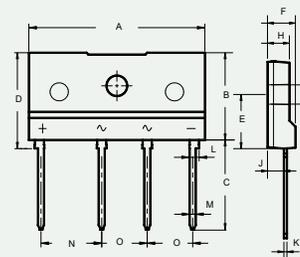
Package Outline

D3K



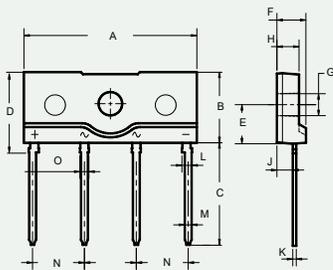
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.524	0.563	13.30	14.30	
B	0.252	0.291	6.40	7.40	
C	0.177	0.217	4.50	5.50	
D	0.406	0.445	10.30	11.30	
E	0.041	0.057	1.05	1.45	
F	0.516	0.531	13.10	13.50	
G	0.024	0.033	0.60	0.85	
H	0.146	0.154	3.70	3.90	
J	0.102	0.142	2.60	3.60	
K	0.122	0.134	3.10	3.40	
L	0.079	0.087	2.00	2.20	
M	0.016	0.024	0.40	0.60	

JA



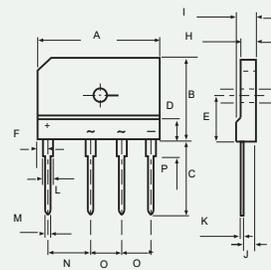
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.130	1.154	28.70	29.30	
B	0.559	0.583	14.20	14.80	
C	0.575	0.598	14.60	15.20	
D	0.614	0.638	15.60	16.20	
E	0.343	0.366	8.70	9.30	
F	0.169	0.193	4.30	4.90	
G	0.122	0.134	3.10	3.40	
H	0.130	0.154	3.30	3.90	
J	0.098	0.114	2.50	2.90	
K	0.012	0.024	0.40	0.60	
L	0.059	0.067	1.50	1.70	
M	0.035	0.043	0.90	1.10	
N	0.390	0.400	9.80	10.20	
O	0.290	0.300	7.30	7.70	

JB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.972	0.996	24.70	25.30	
B	0.394	0.417	10.00	10.60	
C	0.575	0.598	14.60	15.20	
D	0.449	0.472	11.40	12.00	
E	0.213	0.236	5.40	6.00	
F	0.154	0.177	3.90	4.50	
G	0.122	0.134	3.10	3.40	
H	0.114	0.138	2.90	3.90	
J	0.079	0.102	2.00	2.60	
K	0.012	0.024	0.40	0.60	
L	0.053	0.061	1.35	1.55	
M	0.035	0.043	0.90	1.10	
N	0.287	0.303	7.30	7.70	
O	0.047	0.055	1.20	1.40	

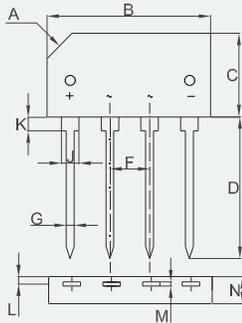
GBJ



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.170	1.190	29.70	30.30	
B	0.780	0.800	19.70	20.30	
C	0.670	0.710	17.00	18.00	
D	0.190	0.190	4.70	4.90	
E	0.430	0.440	10.80	11.20	
F	0.090	0.110	2.30	2.70	
G	0.120	0.130	3.10	3.40	
H	0.130	0.150	3.40	3.80	
R	0.170	0.190	4.40	4.80	
J	0.100	0.110	2.50	2.90	
K	0.020	0.030	0.60	0.80	
L	0.080	0.090	2.00	2.40	
M	0.040	0.040	0.90	1.10	
N	0.390	0.400	9.80	10.20	
O	0.290	0.300	7.30	7.70	
P	0.150	0.170	3.80	4.20	

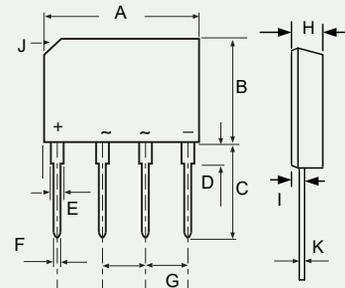
Package Outline

GBL



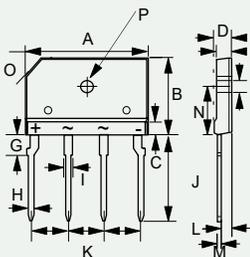
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.118 X 0.118		3.0 X 3.0		X 45°
B	0.756	0.835	19.20	21.20	
C	0.413	0.453	10.50	11.50	
D	0.512	0.591	13.00	15.00	
F	0.193	0.201	4.90	5.10	
G	0.039	0.047	1.00	1.20	
J	0.047	0.071	1.20	1.80	
K	0.079	0.118	2.00	3.00	
L	0.035	0.043	0.90	1.10	
M	0.020	0.027	0.50	0.70	
N	0.118	0.157	3.00	4.00	

GBP



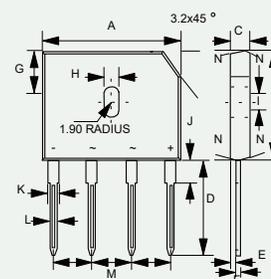
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.561	0.580	14.25	14.75	
B	0.406	0.417	10.10	10.60	
C	0.561	0.581	14.25	14.73	
D	0.071	0.087	1.80	2.20	
E	0.046	0.056	1.17	1.42	
F	0.030	0.034	0.76	0.86	
G	0.140	0.160	3.56	4.06	
H	0.131	0.161	3.35	4.10	
I	0.031	0.043	0.80	1.10	
J	0.106 X 45°		2.70 X 45°		
K	0.012	0.025	0.30	0.64	

KBJ



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.976	0.992	24.80	25.20	
B	0.579	0.602	14.70	15.30	
C	0.154	0.161	3.90	4.10	
D	0.173	0.189	4.40	4.80	
E	0.134	0.150	3.40	3.80	
F	0.122	0.134	3.10	3.40	Φ
G	0.130	0.146	3.30	3.70	
H	0.035	0.043	0.90	1.10	
I	0.059	0.075	1.50	1.90	
J	0.669	0.709	17.00	18.00	
K	0.287	0.303	7.30	7.70	
L	0.098	0.114	2.50	2.90	
M	0.024	0.031	0.60	0.80	
N	0.366	0.413	9.30	10.50	
O	0.118 X 45°		3.0 X 45°		
P	0.122	0.134	3.10	3.40	Φ

GBU



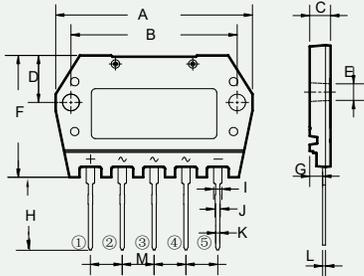
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.860	0.880	21.80	22.30	
B	0.720	0.740	18.30	18.80	
C	0.130	0.142	3.30	3.60	
D	0.690	0.717	17.50	18.20	
E	0.030	0.039	0.76	1.00	
F	0.018	0.024	0.46	0.60	
G	0.290	0.310	7.40	7.90	
H	0.140	0.160	3.50	4.10	
I	0.065	0.085	1.65	2.16	
J	0.060	0.096	1.52	2.45	
K	0.077	0.098	1.95	2.50	
L	0.040	0.050	1.02	1.27	
M	0.190	0.210	4.83	5.33	
N			7.0°		TYP.

Package Outline

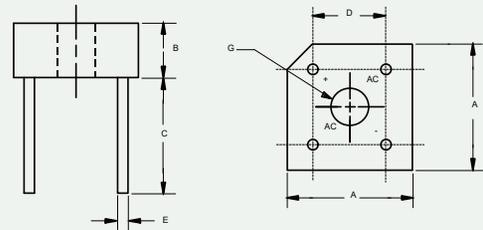
Package Outline

TSB-5

PB-6



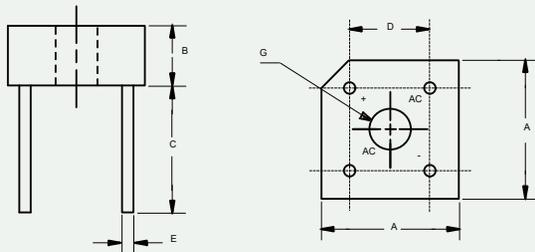
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.834	1.874	46.60	47.60	
B	1.555	1.579	39.50	40.10	
C	0.185	0.209	4.70	5.30	
D	0.433	0.457	11.00	11.60	
E	0.157	0.177	4.00	4.50	
F	1.134	1.173	28.80	29.80	
G	0.118	0.126	3.00	3.20	
H	0.677	0.701	17.20	17.80	
I	0.075	0.083	1.90	2.10	
J	0.039	0.047	1.00	1.20	
K	0.035	0.043	0.90	1.10	
L	0.024	0.031	0.60	0.80	
M	0.296	0.304	7.52	7.72	



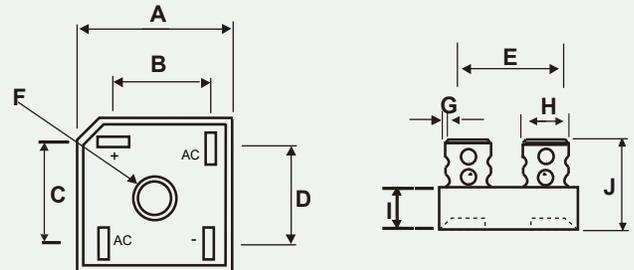
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.578	0.619	14.69	15.71	2PL
B	0.230	0.270	5.84	6.86	
C	0.752	---	19.10	---	
D	0.405	0.445	10.29	11.31	2PL
E	0.038	0.042	0.97	1.07	4PL/TY
G	0.145	---	3.70	---	Φ

PB-10

GBPC



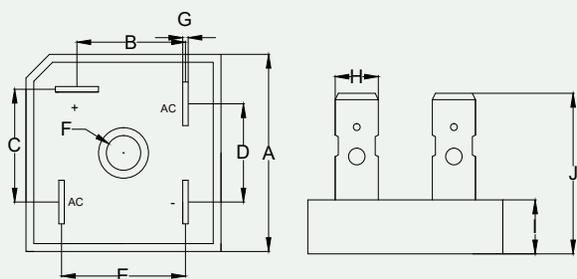
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.730	0.770	18.50	19.56	2PL
B	0.250	0.300	6.35	7.60	
C	0.750	---	19.10	---	
D	0.480	0.520	12.20	13.20	2PL
E	0.050		1.27		4PL/TYP
G	HOLE FOR NO 6 SCREW				Φ



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.114	1.134	28.30	28.80	
B	0.634	0.673	16.10	17.10	
C	0.634	0.673	16.10	17.10	
D	0.543	0.583	13.80	14.80	
E	0.693	0.732	17.60	18.60	
F	0.197		5.00		Φ(Nom.)
G	0.030	0.034	0.76	0.86	
H	0.244	0.256	6.20	6.50	
I	0.291	0.335	7.40	8.50	
J	0.740	0.850	18.80	21.60	

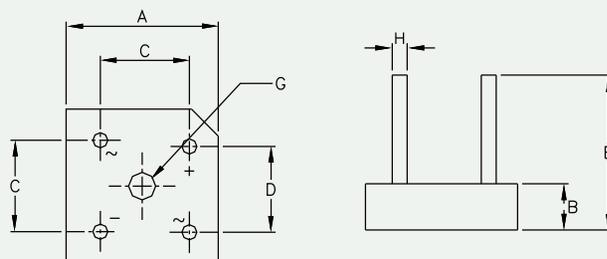
Package Outline

GBPC-H



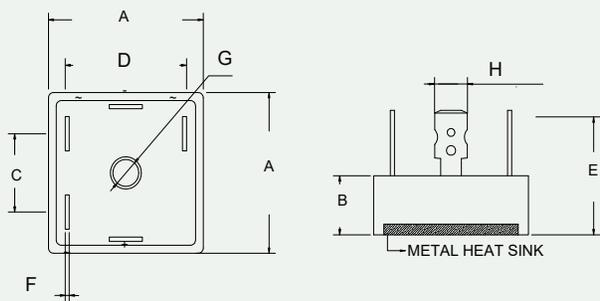
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.114	1.134	28.30	28.80	
B	0.634	0.673	16.10	17.10	
C	0.634	0.673	16.10	17.10	
D	0.543	0.583	13.80	14.80	
E	0.693	0.732	17.60	18.60	
F	0.197		5.00		Φ(Nom.)
G	0.030	0.034	0.76	0.86	
H	0.244	0.256	6.20	6.50	
I	0.291	0.335	7.40	8.50	
J	0.874	0.953	22.20	24.20	

GBPC-W



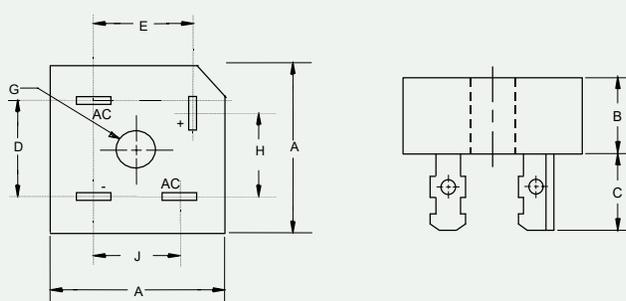
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.110	1.142	28.20	29.00	
B	0.425	0.445	10.80	11.30	
C	0.673	0.752	17.10	19.10	
D	0.410	0.490	10.40	12.40	
E	1.180	---	30.00	---	
H	0.038	0.042	0.97	1.07	
G	0.200	0.220	5.08	5.59	

MT-35A



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.110	1.134	28.20	28.80	
B	0.354	0.394	9.00	10.00	
C	0.610	0.650	15.50	16.50	
D	0.948	0.988	24.10	25.10	
E	0.944		25.00		TYP.
F	0.029	0.033	0.75	0.85	
G	0.193		4.90		TYP.
H	0.244	0.251	6.20	6.40	

MP-50



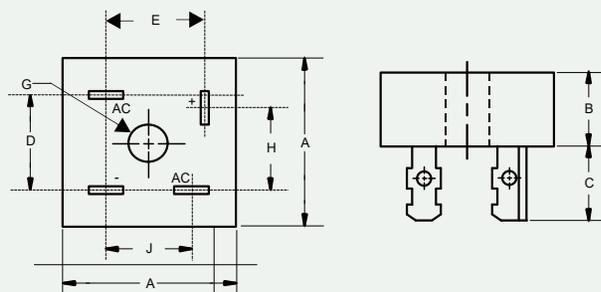
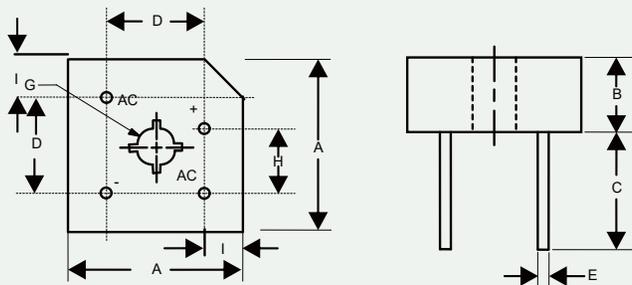
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.110	1.140	28.20	29.00	
B	0.425	0.442	10.80	11.23	
C	0.468	0.558	11.89	14.17	
D	0.689	0.728	17.50	18.50	
E	0.618	0.657	15.70	16.70	
G	0.193	---	4.90	---	Φ
H	0.618	0.657	15.70	16.70	
J	0.531	0.571	13.50	14.50	

Package Outline

Package Outline

MP-50W

MB-35

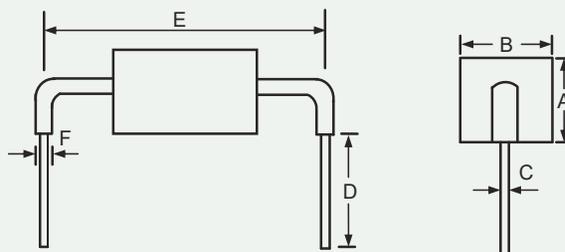
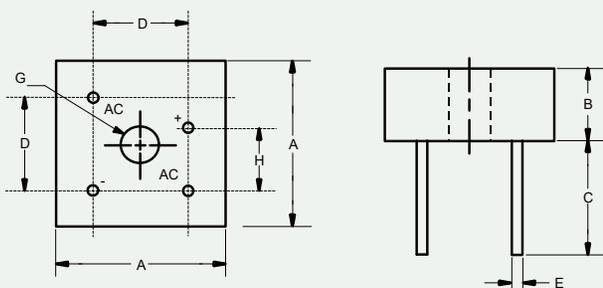


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.118	1.130	28.40	28.70	
B	0.432	0.442	10.97	11.23	
C	0.769	---	19.53	---	
D	0.673	0.752	17.10	19.10	
E	0.038	0.042	0.97	1.07	4PL/TYP
G	0.193	---	4.90	---	Φ
H	0.429	0.468	10.90	11.90	
I	0.169	0.236	4.30	6.00	

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.110	1.135	28.20	28.83	
B	0.425	0.447	10.80	11.35	
C	0.421	0.480	10.70	12.20	
D	0.673	0.751	17.10	19.10	
E	0.602	0.681	15.30	17.30	
G	0.193	---	4.90	---	Φ
H	0.602	0.681	15.30	17.30	
J	0.519	0.598	13.20	15.20	

MB-35W

AK

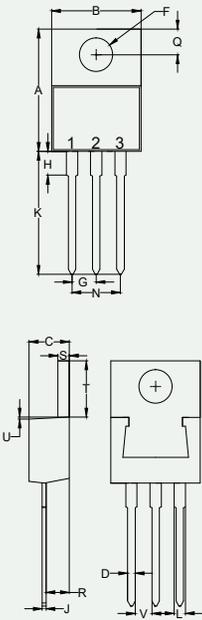


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.115	1.135	28.33	28.83	
B	0.427	0.447	10.85	11.35	
C	0.774	---	19.65	---	
D	0.673	0.752	17.10	19.10	
E	0.038	0.042	0.96	1.07	4PL/TYP
G	0.193	---	4.90	---	Φ
H	0.429	0.469	10.90	11.90	

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	----	0.630	----	16.00	
B	----	0.709	----	18.00	
C	0.047	0.052	1.20	1.32	
D	0.197	----	5.00	----	
E	0.922	0.979	23.43	24.87	
F	----	0.157	----	4.00	

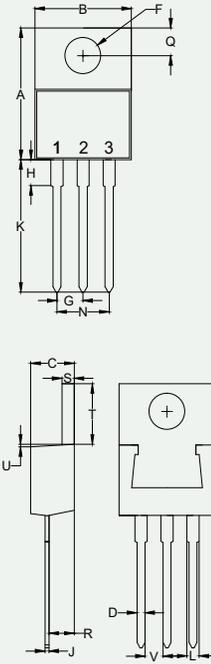
Package Outline

TO-220



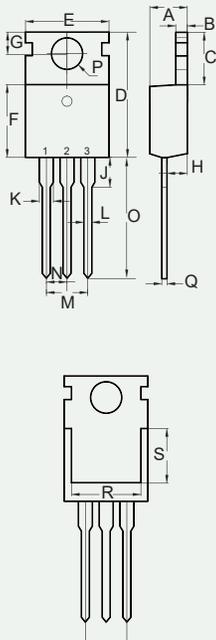
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	0.560	0.625	14.22	15.88	
B	0.380	0.420	9.65	10.67	
C	0.140	0.190	3.56	4.82	
D	0.020	0.045	0.51	1.14	
F	0.139	0.161	3.53	4.09	Φ
G	0.090	0.110	2.29	2.79	
H	-----	0.250	-----	6.35	
J	0.012	0.025	0.30	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
N	0.190	0.210	4.83	5.33	
Q	0.100	0.135	2.54	3.43	
R	0.080	0.115	2.04	2.92	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	-----	0.050	-----	1.27	
V	0.045	-----	1.15	-----	

TO-220AB



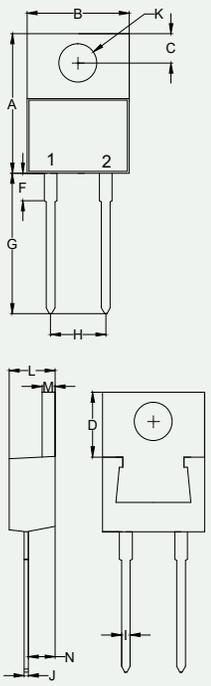
DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	0.560	0.625	14.22	15.88	
B	0.380	0.429	9.65	10.90	
C	0.140	0.201	3.56	5.10	
D	0.020	0.045	0.51	1.14	
F	0.131	0.170	3.34	4.31	Φ
G	0.079	0.121	2.01	3.07	
H	-----	0.250	-----	6.35	
J	0.011	0.025	0.28	0.64	
K	0.500	0.580	12.70	14.73	
L	0.045	0.060	1.14	1.52	
N	0.158	0.242	4.02	6.14	
Q	0.087	0.135	2.22	3.43	
R	0.080	0.126	2.04	3.19	
S	0.045	0.055	1.14	1.39	
T	0.230	0.270	5.84	6.86	
U	-----	0.050	-----	1.27	
V	0.045	-----	1.15	-----	

TO-220AB(H)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	0.172	0.188	4.37	4.77	
B	0.049	0.057	1.25	1.45	
C	0.246	0.270	6.25	6.85	
D	0.594	0.634	15.10	16.10	
E	0.382	0.406	9.70	10.30	
F	0.346	0.370	8.80	9.40	
G	0.102	0.118	2.60	3.00	
H	0.087	0.102	2.20	2.60	
J	-----	0.134	-----	3.40	
K	0.046	0.058	1.17	1.47	
L	0.028	0.037	0.70	0.95	
M	0.200 BSC		5.08 BSC		
N	0.100 BSC		2.54 BSC		
O	0.502	0.543	12.75	13.80	
P	0.134	0.150	3.40	3.80	Φ
Q	0.016	0.026	0.40	0.65	
R	0.276	-----	7.00	-----	
S	0.217	-----	5.50	-----	

TO-220AC

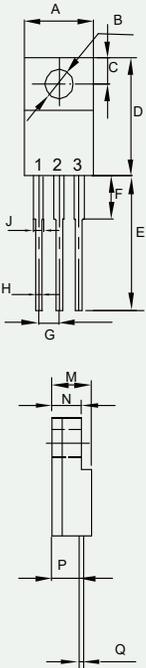


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	0.560	0.625	14.22	15.88	
B	0.380	0.420	9.65	10.67	
C	0.100	0.135	2.54	3.43	
D	0.230	0.270	5.84	6.86	
F	-----	0.250	-----	6.35	
G	0.500	0.580	12.70	14.73	
H	0.190	0.210	4.83	5.33	
I	0.020	0.045	0.51	1.14	
J	0.012	0.025	0.30	0.64	
K	0.139	0.161	3.53	4.09	Φ
L	0.140	0.190	3.56	4.83	
M	0.045	0.055	1.14	1.40	
N	0.080	0.115	2.03	2.92	

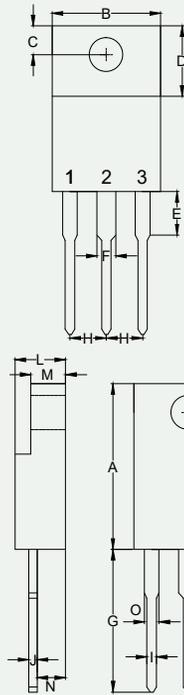
Package Outline

Package Outline

TO-220F ITO-220AB

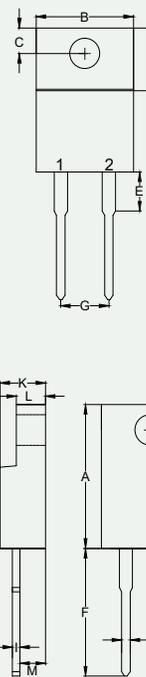


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.392	0.421	9.96	10.70	
B	0.138		3.50		Φ
C	0.106		2.70		TYP.
D	0.567	0.642	14.40	16.30	
E	0.520		13.20		TYP.
F	---	0.177	---	4.50	
G	0.100		2.54		TYP.
H	0.020	0.035	0.50	0.90	
J	0.043	0.053	1.10	1.35	
M	0.169	0.201	4.30	5.10	
N	---	0.140	---	3.56	
P	0.083	0.126	2.10	3.20	
Q	0.020	0.032	0.50	0.80	

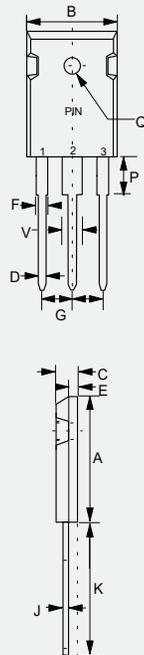


DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.567	0.642	14.40	16.30	
B	----	0.421	----	10.70	
C	0.085	0.128	2.15	3.25	
D	0.248	0.272	6.30	6.90	
E	----	0.177	----	4.50	
F	----	0.071	----	1.80	
G	0.500	0.539	12.70	14.20	
H	0.100		2.55		
I	----	0.035	----	0.90	
J	----	0.032	----	0.80	
K	0.102	0.150	2.60	3.80	Φ
L	----	0.201	----	5.10	
M	----	0.140	----	3.56	
N	0.083	0.126	2.10	3.20	
O	----	0.071	----	1.80	

ITO-220AC TO-247



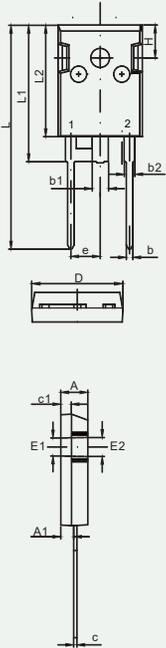
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.567	0.606	14.40	15.40	
B	----	0.406	----	10.30	
C	0.100	0.112	2.55	2.85	
D	0.248	0.272	6.30	6.90	
E	----	0.161	----	4.10	
F	0.500	0.543	12.70	13.80	
G	0.200		5.10		
H	----	0.035	----	0.90	
I	----	0.032	----	0.80	
J	0.102	0.134	2.60	3.40	Φ
K	----	0.189	----	4.80	
L	----	0.123	----	3.10	
M	0.098	0.114	2.50	2.90	



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.787	0.866	20.00	22.00	
B	0.598	0.638	15.20	16.20	
C	0.185	0.208	4.70	5.30	
D	0.035	0.059	0.90	1.50	
E	0.059	0.094	1.50	2.40	
F	0.067	0.091	1.70	2.30	
J	0.019	0.031	0.48	0.80	
K	0.748	0.833	19.00	21.15	
P	0.122	0.189	3.10	4.80	
Q	0.118	0.150	3.00	3.80	Φ
V	0.106	0.134	2.70	3.40	
G	0.197	0.224	5.00	5.70	

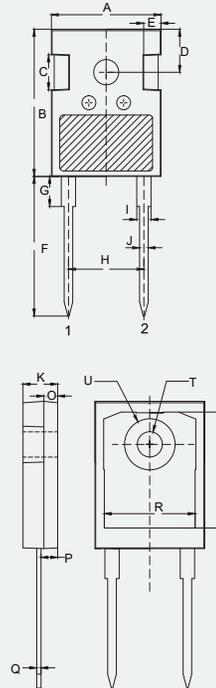
Package Outline

TO-247AC



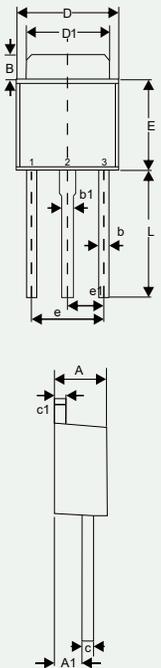
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.185	0.209	4.70	5.30	
A1	0.087	0.102	2.20	2.60	
b	0.035	0.059	0.90	1.50	
b1	0.110	0.126	2.80	3.20	
b2	0.067	0.090	1.70	2.30	
c	0.020	0.028	0.50	0.70	
c1	0.071	0.087	1.80	2.20	
D	0.602	0.626	15.30	15.90	
E1	0.138		3.500		REF.
E2	0.142		3.600		REF.
L	1.583	1.646	40.20	41.80	
L1	0.976	0.988	24.80	25.10	
L2	0.799	0.811	20.30	20.60	
e	0.215		5.450		TYP.
H	0.236		6.000		REF.

TO-247AD



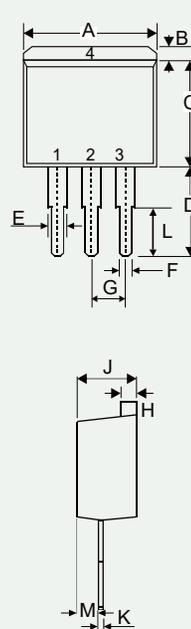
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.610	0.663	15.50	16.85	
B	0.815	0.839	20.70	21.30	
C	0.189	0.205	4.80	5.20	
D	0.242		6.15		BSC.
E	0.091	0.106	2.30	2.70	
F	0.772	0.796	19.62	20.22	
G	-----	0.169	-----	4.30	
H	0.428		10.88		BSC.
I	0.075	0.087	1.91	2.21	
J	0.044	0.054	1.11	1.36	
K	0.189	0.205	4.80	5.20	
O	0.073	0.085	1.85	2.15	
P	0.087	0.103	2.21	2.61	
Q	0.020	0.030	0.51	0.75	
R	0.512	0.535	13.00	13.60	
S	0.640	0.663	16.25	16.85	
T	0.134	0.150	3.40	3.80	Φ
U	-----	0.287	-----	7.30	Φ

TO-251



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.087	0.094	2.20	2.40	
A1	0.042	0.054	1.05	1.35	
B	0.053	0.065	1.35	1.65	
b	0.020	0.028	0.50	0.70	
b1	0.028	0.035	0.70	0.90	
c	0.017	0.023	0.43	0.58	
c1	0.017	0.023	0.43	0.58	
D	0.250	0.262	6.35	6.65	
D1	0.205	0.213	5.20	5.40	
E	0.213	0.224	5.40	5.70	
e1	0.091		2.300		TYP.
e	0.177	0.185	4.50	4.70	
L	0.295	0.311	7.50	7.90	

TO-262



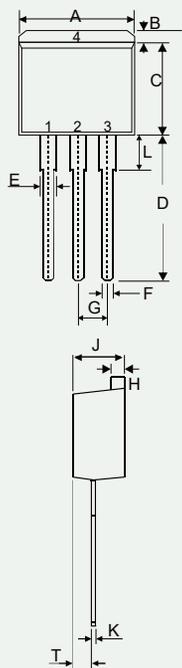
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.394	0.402	10.00	10.20	
B	0.043	0.051	1.10	1.30	
C	0.339	0.346	8.60	8.80	
D	0.272	0.280	6.90	7.10	
E	0.047	0.051	1.20	1.30	
F	0.028	0.031	0.70	0.80	
G	0.100		2.54		TYP.
H	0.050	0.050	1.26	1.28	
J	0.177	0.185	4.50	4.70	
K	0.015	0.019	0.37	0.47	
L	0.114	0.122	2.90	3.10	
M	0.056	0.064	1.43	1.63	

Package Outline

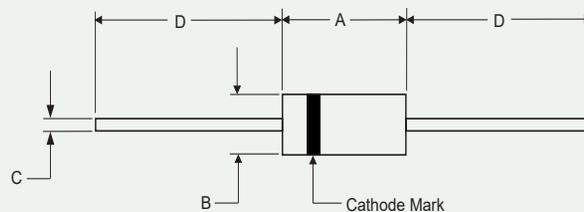
Package Outline

TO-262L

A-405



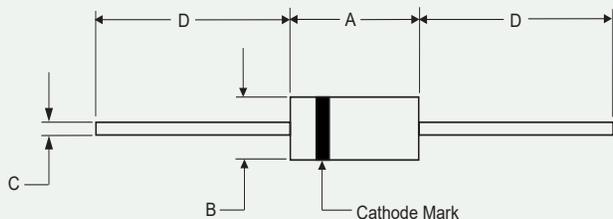
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.394	0.405	10.00	10.30	
B	0.043	0.059	1.10	1.50	
C	0.323	0.346	8.20	8.80	
D	0.512	0.551	13.00	14.00	
E	0.047	0.051	1.20	1.30	
F	0.028	0.035	0.70	0.90	
G	0.100		2.54		TYP.
H	0.047	0.055	1.20	1.40	
J	0.177	0.185	4.50	4.70	
K	0.014	0.019	0.35	0.47	
L	0.154	0.161	3.90	4.10	
T	0.059	0.067	1.50	1.70	



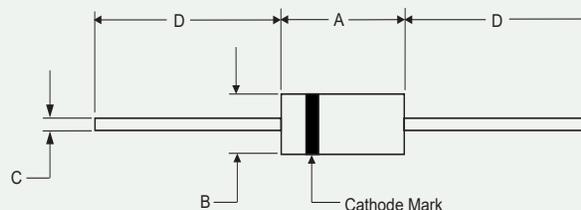
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.166	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	
C	---	0.024	---	0.60	
D	1.000	---	25.40	---	

DO-15

DO-201AD



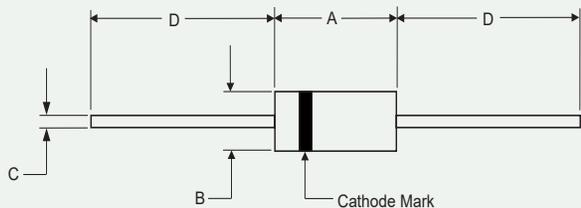
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.230	0.300	5.80	7.60	
B	0.104	0.140	2.60	3.60	
C	0.026	0.034	0.70	0.90	
D	1.000	---	25.40	---	



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.287	0.374	7.30	9.50	
B	0.189	0.208	4.80	5.30	
C	0.048	0.052	1.20	1.30	
D	1.000	---	25.40	---	

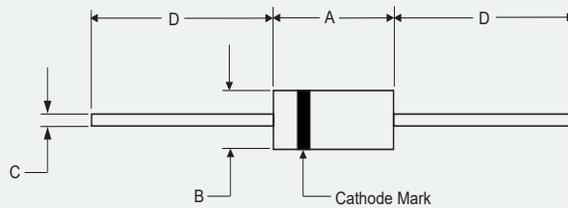
Package Outline

DO-201AE



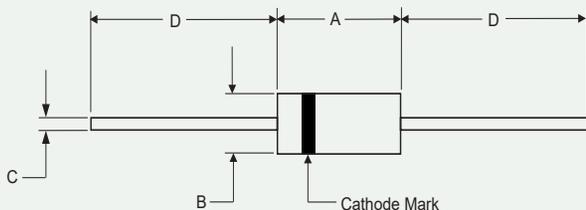
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	0.370	---	9.50	
B	---	0.209	---	5.30	
C	0.038	0.042	0.96	1.06	
D	1.000	---	25.40	---	

DO-41



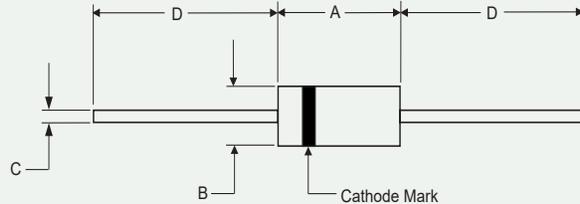
DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.160	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	Diameter
C	0.028	0.034	0.71	0.86	Diameter
D	1.000	---	25.40	---	

R-3



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	0.160	---	4.10	
B	---	0.160	---	4.10	
C	0.040	0.042	1.01	1.07	
D	1.000	---	25.40	---	

R-6



DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.340	0.360	8.60	9.10	
B	0.340	0.360	8.60	9.10	
C	0.048	0.052	1.20	1.30	
D	1.000	---	25.40	---	