

Features

- High Junction Temperature Capability
- Low Leakage Current
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

30 Amp Schottky Barrier Rectifiers 300 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}			
Working Peak Reverse Voltage	V _{RWM}	300	V	
DC Blocking Voltage	V _R			
RMS Reverse Voltage	V _{RMS}	210	V	
Average Rectified Forward Current				
Per Diode Per Device	I _{F(AV)}	15 30	А	
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I _{FSM}	250	А	
Current Squared Time @ 1ms≤t≤8.3ms	l²t	259	A ² s	

TO-220AB

Internal Structure

Simplified Outline	Graphic Symbol		
MCC MBR30300CTH	1 o 2 & Case		

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

	INCI MIN	HES	M	1.4	
	MIN		171	IVI	NOTE
		MAX	MIN	MAX	NOTE
A 0).560	0.625	14.22	15.88	
B 0	0.380	0.429	9.65	10.90	
C 0).140	0.201	3.56	5.10	
D 0	0.020	0.045	0.51	1.14	
F 0).131	0.170	3.34	4.31	Ф
G 0	0.079	0.121	2.01	3.07	
Н		0.250		6.35	
J 0	0.011	0.025	0.28	0.64	
K 0).500	0.580	12.70	14.73	
L 0	0.045	0.060	1.14	1.52	
N 0).158	0.242	4.02	6.14	
Q 0	0.087	0.135	2.22	3.43	
R 0	080.0	0.126	2.04	3.19	
S 0	0.045	0.055	1.14	1.39	
T 0).230	0.270	5.84	6.86	
U		0.050		1.27	-
V 0	0.045		1.15		



Thermal characteristics

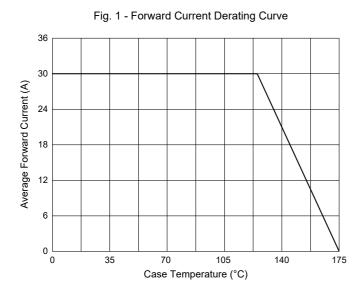
Symbol	Parameter	Conditions	Min	Тур	Max	Unit
TJ	Operating Junction Temperature Range		-55		175	°C
T _{stg}	Storage Temperature Range		-55		175	°C
Rth _(J-C)	Thermal Resistance from Junction to Case	Per Leg		1.5		°C/W

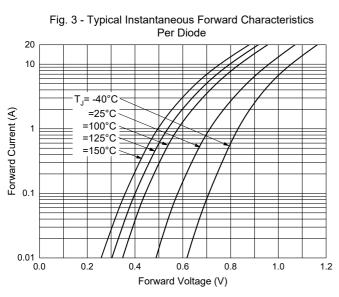
Electrical Characteristics @ 25°C Unless Otherwise Specified

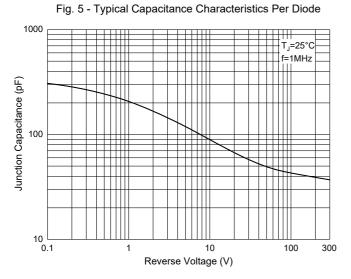
Parameter	Symbol	Test Conditions	Min	Тур	Max	Unit
Forward Voltage	V _F	I _F =15A;T _J =25°C		1.05	1.30	V
Per Diode		I _F =15A;T _J =125°C		0.86	1.00	V
Reverse Current	I _R	V _R =300V;T _J =25°C			10	
Per Diode		V _R =300V;T _J =125°C			100	μΑ
Junction Capacitance Per Diode	CJ	V_R =4V;f=1MHz; T_J =25°C		130		pF

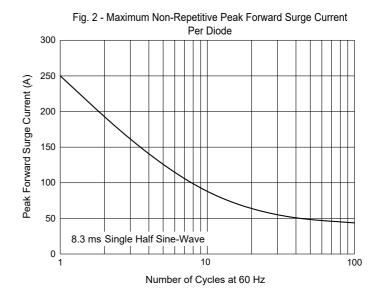


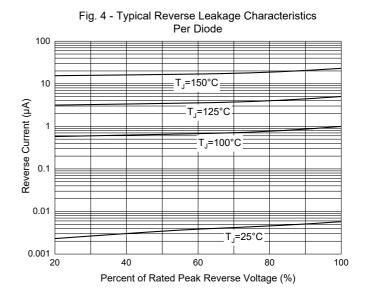
Curve Characteristics













Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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