



KTA1281

PNP Plastic-Encapsulate Transistors

Features

- Halogen free available upon request by adding suffix "-HF"
- High speed switching time
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{CBO}	Collector-Base Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current	-2	A
P_C	Collector power dissipation	1	W
T_J	Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-emitter Breakdown Voltage ($I_C = -10\text{mA}$, $I_B = 0$)	-50	---	---	Vdc
$V_{(BR)CBO}$	Collector-base Breakdown Voltage ($I_C = -100\ \mu\text{A}$, $I_E = 0$)	-50	---	---	Vdc
$V_{(BR)EBO}$	Emitter-base Breakdown Voltage ($I_E = -100\ \mu\text{A}$, $I_C = 0$)	-5.0	---	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CE} = -50\text{Vdc}$, $I_E = 0$)	---	---	-0.1	μA
I_{CEO}	Collector Cutoff Current ($V_{CE} = -40\text{Vdc}$, $I_B = 0$)	---	---	-2.0	μA
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB} = -5.0\text{Vdc}$, $I_C = 0$)	---	---	-0.1	μA

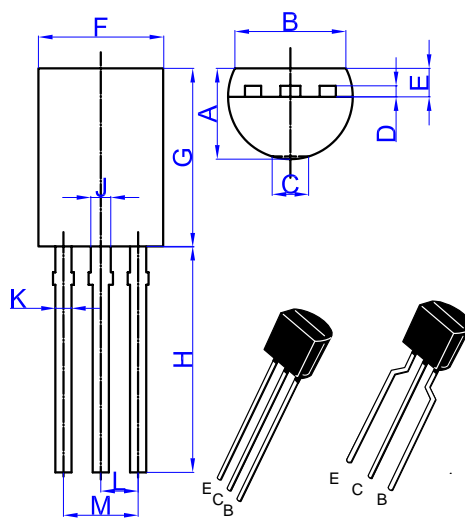
ON CHARACTERISTICS

h_{FE}	DC Current gain ($I_C = -0.5\text{A}$, $V_{CE} = -2\text{Vdc}$) ($I_C = -1.5\text{A}$, $V_{CE} = -2\text{Vdc}$)	70 40	---	240 ---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C = -1\text{A}$, $I_B = -0.05\text{A}$)	---	---	-0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C = -1\text{A}$, $I_B = -0.05\text{A}$)	---	---	-1.2	Vdc
f_T	Transistor Frequency ($V_{CE} = -2\text{Vdc}$, $I_C = -0.5\text{mA}$)	---	100	---	MHz
C_{ob}	Collector Output Capacitance ($V_{CB} = -10\text{Vdc}$, $I_E = 0$, $f = 1.0\text{MHz}$)	---	40	---	pF
t_{on}	Turn-on Time ($V_{CC} = -30\text{V}$, $I_{B1} = -I_{B2} = -0.05\text{A}$, $I_C = -1\text{A}$)	---	0.1	---	μs
t_s	Storage Time ($V_{CC} = -30\text{V}$, $I_{B1} = -I_{B2} = -0.05\text{A}$, $I_C = -1\text{A}$)	---	1	---	μs
t_f	Fall Time ($V_{CC} = -30\text{V}$, $I_{B1} = -I_{B2} = -0.05\text{A}$, $I_C = -1\text{A}$)	---	0.1	---	μs

CLASSIFICATION OF h_{FE}

Rank	O	Y
Range	70-140	120-240

TO-92L



STRAIGHT LEAD BULK PACK
BENT LEAD AMMO PACK

DIM	MM		INCHES		NOTE
	MIN	MAX	MIN	MAX	
A	3.700	4.100	.146	.161	
B	4.000	---	.157	---	
C	0.000	0.300	0.000	0.012	
D	0.350	0.450	.014	.018	
E	1.280	1.580	.050	.062	
F	4.700	5.100	.185	.201	
G	7.800	8.200	.307	.323	
H	13.80	14.20	.543	.559	
J	.600	.800	.024	.031	
K	0.350	.550	.014	.022	
L	1.270		.050		Straight Lead
	2.200	2.800	.086	.110	Bent Lead
M	2.440		.096		Straight Lead
	4.400	5.600	.173	.220	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.



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Ordering Information

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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