

Power Transistor



Description:

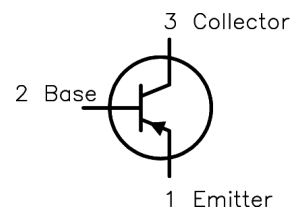
PNP silicon power transistor in a TO-3 package.
Designed for medium-speed switching and amplifier applications.

Features:

- Excellent Safe Operating Areas
- h_{FE} (Min) 25 and 50 @ $I_C = 1A$

**RoHS
Compliant**

PNP



Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	80	V
Collector-Base Voltage	V_{CBO}	80	
Emitter-Base Voltage	V_{EBO}	7	
Continuous Collector Current	I_C	10	A
Base Current Continuous	I_B	4	
Total Device Dissipation at $T_c = 25^\circ C$ Derate above $25^\circ C$	P_D	150 0.857	W mW/ $^\circ C$
Operating Junction Temperature Range	T_j	-65 to +200	$^\circ C$

Electrical Characteristics ($T_a = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Max.	Unit
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OFF Characteristics

Collector - Emitter Breakdown Voltage (Note 1)	$V_{(BR)CEO}$	$I_C = 200mA, I_B = 0$	80	-	V
Collector Cut-Off Current	I_{CEX}	$V_{CE} = 80V, V_{EB(off)} = 1.5V$	-	1	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 7V, I_C = 0$	-	5	

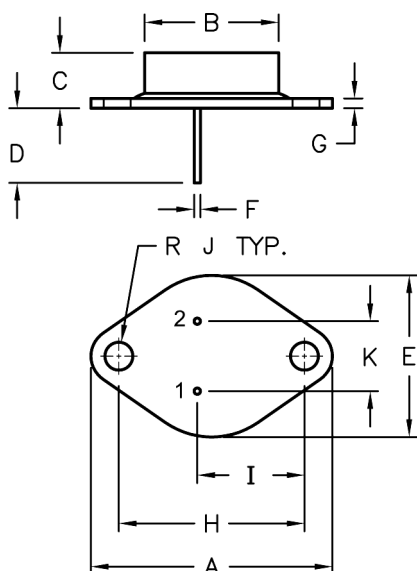
ON Characteristics (Note 1)

DC Current Gain	h_{FE}	$V_{CE} = 2V, I_C = 1A$	50	180	-
		$V_{CE} = 2V, I_C = 3A$	30	-	-
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 5A, I_B = 0.5A$	-	1	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C = 5A, I_B = 2V$	-	1.8	
		$I_C = 10A, I_B = 4V$	-	4	

Small-Signal Characteristics

Current Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 500mA, f = 1MHz$	4	-	MHz
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Note 1. Plus Test: Pulse Width = 300 μs , Duty Cycle $\leq 2\%$.



Dimensions	Min.	Max.
A	38.75	39.96
B	19.28	22.23
C	7.96	9.23
D	11.18	12.19
E	25.2	26.67
F	0.92	1.09
G	1.38	1.62
H	29.9	30.4
I	16.64	17.3
J	3.88	4.36
K	10.67	11.18

Dimensions : Millimetres

Pin Configuration:

1. Base
2. Emitter
3. Collector (Case)

Part Number Table

Description	Part Number
Transistor, TO-3	2N3792

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