Power Transistor

Description:

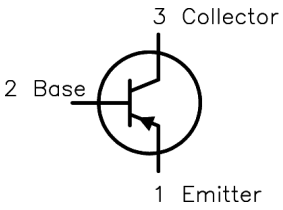
PNP silicon power transistor in a TO-3 package. Designed for medium-speed switching and amplifier applications.

RoHS Compliant

Features:

- Excellent Safe Operating Areas
- hFE (Min) 25 and 50 @ I_C = 1A

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°C Derate above 25°C	P_D	150 0.857	W mW/°C
Operating Junction Temperature Range	T_j	-65 to +200	°C

Electrical Characteristics (T_a = 25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Max.	Unit
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

Note 1. Plus Test: Pulse Width = 300μs, Duty Cycle ≦2%.

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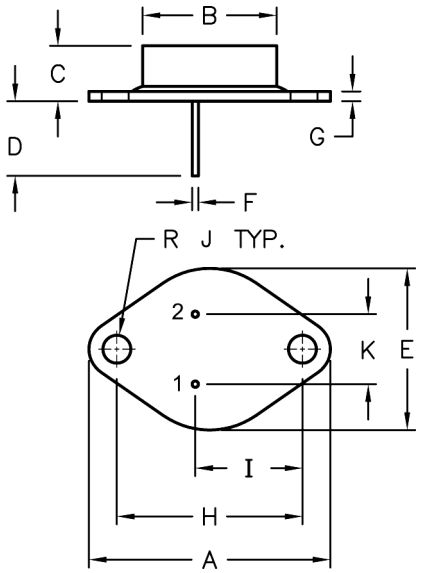

Dimensions	Min.	Max.
A	38.75	39.96
B	19.28	22.23
C	7.96	9.23
D	11.18	12.19
E	25.2	26.67
F	0.92	1.09
G	1.38	1.62
H	29.9	30.4
I	16.64	17.3
J	3.88	4.36
K	10.67	11.18

Dimensions : Millimetres

Pin Configuration:

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

Part Number Table

Description	Part Number
Transistor, TO-3	2N3792