Bipolar Transistor

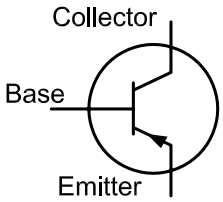
multicomp PRO

RoHS Compliant

Description:

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

PNP



Features:

- Excellent safe operating areas
- h_{fe} (Min.) 25 and 50 @ I_C = 1A

Absolute Maximum Ratings:

Characteristic	Symbol	Rating
Collector - Base Voltage	V_{CBO}	80V
Collector - Emitter Voltage	V_{CEO}	80V
Emitter - Base Voltage	V_{EBO}	7V
Continuous Collector Current	I_C	10A
Base Current Continuous	I_B	4A
Total Device Dissipation (T_C = +25°C) Derate above 25°C	P_D	150W 0.857mW/°C
Operating Junction Temperature Range	T_J	-65°C 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_{CEV}	V_{CE} = 80V, $V_{EB(off)}$ = 1.5V	-	1	mA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 7V, I_C = 0	-	5	mA
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 = 2A	-	1.8	
		I_C = 10A, I_B = 4A	-	4	
Small-Signal Characteristics					
Current Gain-Bandwidth Product	f_T	V_{CE} = 10V, I_C = 500mA, f = 1MHz	4	-	MHz

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

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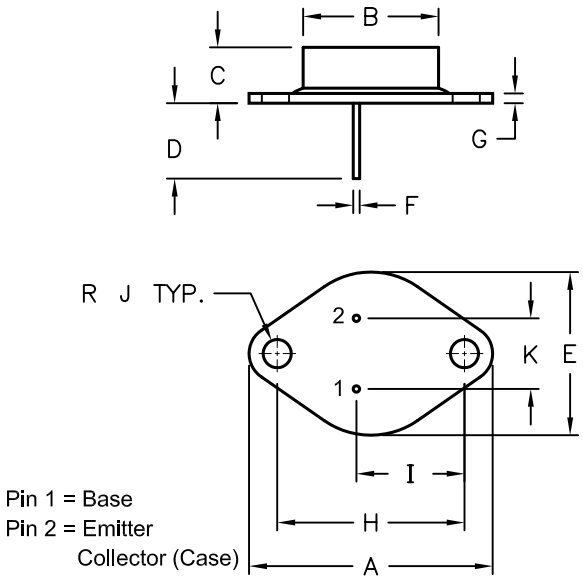
Diagram



Dim.	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

Part Number Table

Description	Part Number
Power Transistor, Silicon, TO-3, PNP, 10A, 80V	2N3792