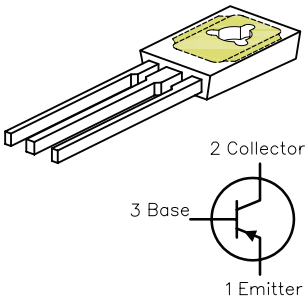
Bipolar Transistor

multicomp PRO

RoHS Compliant



Description:

Silicon TO-126 PNP Power Transistor for use in power amplifier and switching excellent safe area limits.

Absolute Maximum Ratings:

Characteristic	Symbol	Rating
Collector - Base Voltage	V_{CBO}	80V
Collector - Emitter Voltage	V_{CEO}	80V
Emitter - Base Voltage	V_{EBO}	5V
Continuous Collector Current	I_C	4A
Base Current	I_B	1A
Total Device Dissipation (T_C = +25°C) Derate above 25°C	P_D	40W 320mW/°C
Operating Junction Temperature Range	T_J	-65°C to +150°C
Storage Temperature Range	T_{STG}	-65°C to +150°C

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

Parameter	Symbol	Test Conditions	Min.	Max.	Unit
OFF Characteristics					
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 100mA, I_B = 0 (Note1)	80	-	V
Collector Cut-off Current	I_{CEO}	V_{CE} = 80V, I_E = 0	-	1	mA
	I_{CBX}	V_{CE} = 80V, $V_{EB(off)}$ = 1.5V	-	0.1	mA
	I_{CEO}	V_{CE} = 80V, I_E = 0	-	0.1	mA
Emitter Cut-off Current	I_{EBO}	V_{EB} = 5V, I_C = 0	-	1	mA
ON Characteristics (Note 1)					
DC Current Gain	h_{FE}	V_{CE} = 2V, I_C = 1.5A	20	80	-
		V_{CE} = 2V, I_C = 4A	7	-	-
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 1.5A, I_B = 0.15mA	-	0.6	V
		I_C = 4A, I_B = 1A	-	1.4	V
Base - Emitter On Voltage	$V_{BE(on)}$	I_C = 1.5A, V_{CE} = 2V	-	1.2	V

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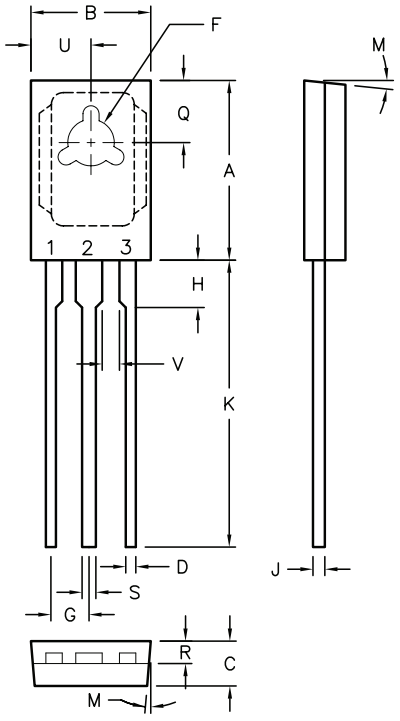
Parameter	Symbol	Test Conditions	Min.	Max.	Unit
Small-Signal Characteristics					
Current Gain - Bandwidth Product	f_T	V_{CE} = 10V, I_C = 1A, f = 1MHz	2	-	MHz

Note 1 : Pulse test : Pulse width ≦ 300μs, Duty Cycle ≦ 2%



Pin Configuration:
1. Emitter
2. Collector
3. Base

Dim.	Min.	Max.
A	10.8	11.05
B	7.49	7.75
C	2.41	2.67
D	0.51	0.66
F	2.92	3.18
G	2.31	2.46
H	1.27	2.41
J	0.38	0.64
K	15.11	16.64
M	3° TYP	
Q	3.76	4.01
R	1.14	1.4
S	0.64	0.89
U	3.68	3.94
V	1.02	-

Dimensions : Millimetres

Part Number Table

Description	Part Number
Bipolar Transistor, PNP, 4A, 80V, TO-126	2N5195