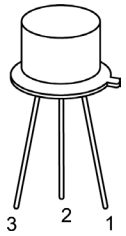
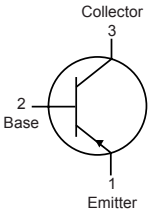
Bipolar Transistor

multicomp PRO

RoHS Compliant





Description:

A epitaxial silicon PNP planar transistor in a TO-39 type package designed for use as drivers for high power transistors in general purpose amplifier and switching circuits.

Maximum Ratings:

Characteristic	Symbol	Rating	Unit
Collector - Emitter Voltage	V_{CEO}	80	V
Collector - Base Voltage	I_E		
Emitter - Base Voltage	I_C	7	
Collector Current		1	A
Base Current	I_B	200	mA
Total Device Dissipation (T_C = +25°C)	P_{tot}	6	W
Total Device Dissipation(T_A = +25°C)		1	
Operating Junction Temperature	T_J	-65 to +200	°C
Storage Temperature Range	T_{stg}		
Thermal Resistance, Junction-to-Case	R_{thJC}	29	°C/W

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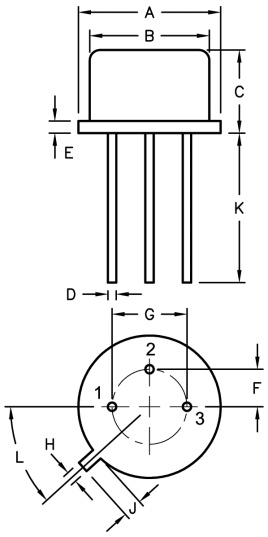
Electrical Characteristics: (T_A = +25°C Unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 80V, I_E = 0	-	100	µA
	I_{CEO}	V_{CE} = 60V, I_B = 0		1	mA
	I_{CEV}	V_{CE} = 80V, V_{BE} = -1.5V		0.1	µA
		V_{CE} = 60V, V_{BE} = -1.5V, T_C = +150°C		1	mA
Emitter Cutoff Voltage	I_{EBO}	V_{EB} = 7V, I_C = 0		500	µA
Collector - Emitter Sustaining Voltage	$V_{CEO(sus)}$	I_C = 100mA, I_B = 0, (Note1)	80	-	V
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 1A, I_B = 125mA, (Note1)	-	0.6	
Base-Emitter On Voltage	V_{BE}	V_{CE} = 1V, I_C = 250mA		1	
DC Current Gain	h_{FE}	I_C = 250mA, V_{CE} = 2V, (Note 1)	30	150	-
		I_C = 1A, V_{CE} = 1V, (Note 1)	10	-	
Transition Frequency	f_t	V_{CE} = 10V, I_C = 100mA, f = 1MHz	3		MHz
Collector - Base Capactiance	C_{cbo}	V_{CB} = 10V, I_E = 0, f = 0.1MHz	-	100	pF
Small - Signal Current Gain	h_{fe}	V_{CE} = 10V, I_C = 50mA, f = 1kHz	25	-	-

Note:
1. Pulse Duration : ≦300µs, Duty Cycle ≦2%



Dimensions	A	B	C	D	E	F	G	H	I	J	K
Min.	8.5	7.74	6.09	0.4	-	2.41	4.82	0.71	0.73	12.7	42°
Max.	9.39	8.5	6.6	0.53	0.88	2.66	5.33	0.86	1.02	-	48°

Dimensions : Millimetres

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

Part Number Table

Description	Part Number
Transistor, PNP, 3A, 80V, TO-39	2N4236