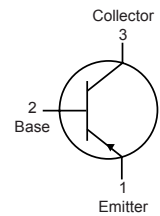
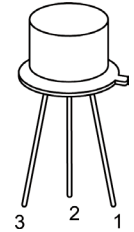


# Bipolar Transistor

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:

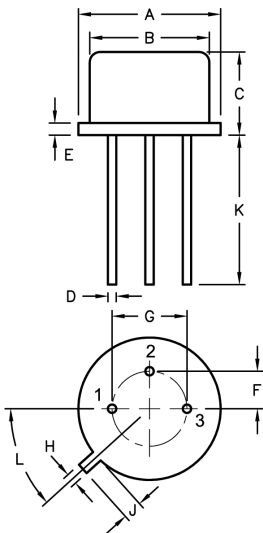
Characteristic	Symbol	Rating	Unit
Collector - Emitter Voltage	$V_{CEO}$	80	V
Collector - Base Voltage	$V_{EB}$		
Emitter - Base Voltage	$V_{EC}$	7	A
Collector Current		1	
Base Current	$I_B$	200	mA
Total Device Dissipation ( $T_C = +25^\circ\text{C}$ )	$P_{tot}$	6	W
Total Device Dissipation ( $T_A = +25^\circ\text{C}$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

## Electrical Characteristics: ( $T_A = +25^\circ\text{C}$ Unless otherwise specified)

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

### Note:

1. Pulse Duration :  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2\%$



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

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