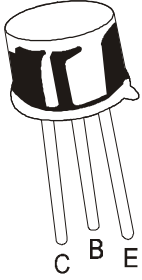


PNP SILICON PLANAR TRANSISTORS

**2N4234, 2N4235
2N4236**

**TO-39
Metal Can Package**



General Purpose Transistor

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	2N4234	2N4235	2N4236	UNIT
Collector Emitter Voltage	V_{CEO}	40	60	80	V
Collector Base Voltage	V_{CBO}	40	60	80	V
Emitter Base Voltage	V_{EBO}	7.0			V
Base Current	I_B	200			mA
Collector Current Continuous	I_C	1.0			A
Power Dissipation @ $T_a=25^\circ\text{C}$ Derate Above 25°C	P_D	1.0			W
		5.7			mW/ $^\circ\text{C}$
Power Dissipation @ $T_c=25^\circ\text{C}$ Derate Above 25°C	P_D	6.0			W
		34			mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200			$^\circ\text{C}$

THERMAL CHARACTERISTICS

Junction to Case	$R_{th(j-c)}$	29	$^\circ\text{C/W}$
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ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

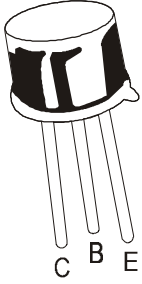
DESCRIPTION	SYMBOL	TEST CONDITION	2N4234	2N4235	2N4236	UNIT
Collector Emitter Voltage	V_{CEO}	$I_C=1\text{mA}, I_B=0$	40	60	80	V
Collector Cut Off Current	I_{CEO}	$V_{CE}=30\text{V}, I_B=0$ $V_{CE}=40\text{V}, I_B=0$ $V_{CE}=60\text{V}, I_B=0$	1.0	1.0	1.0	mA
Collector Cut Off Current	I_{CEX}	$V_{CE}=40\text{V}, V_{EB}=1.5\text{V}$ $V_{CE}=60\text{V}, V_{EB}=1.5\text{V}$ $V_{CE}=80\text{V}, V_{EB}=1.5\text{V}$ $T_C=150^\circ\text{C}$ $V_{CE}=30\text{V}, V_{EB}=1.5\text{V}$ $V_{CE}=40\text{V}, V_{EB}=1.5\text{V}$ $V_{CE}=60\text{V}, V_{EB}=1.5\text{V}$	0.1	0.1	0.1	mA
			1.0	1.0	1.0	mA
					1.0	mA

			MIN	TYP	MAX	
Collector Cut Off Current	I_{CBO}	$V_{CB}=\text{Rated } V_{CBO}, I_E=0$			0.1	mA
Emitter Cut Off Current	I_{EBO}	$V_{EB}=7\text{V}, I_C=0$			0.5	mA
DC Current Gain	$*h_{FE}$	$I_C=100\text{mA}, V_{CE}=1\text{V}$ $I_C=250\text{mA}, V_{CE}=1\text{V}$ $I_C=500\text{mA}, V_{CE}=1\text{V}$ $I_C=1\text{A}, V_{CE}=1\text{V}$	40 30 20 10		150	

***Pulse Test: Pulse Width $\leq 300\text{ms}$, Duty Cycle $\leq 2\%$**

PNP SILICON PLANAR TRANSISTORS

2N4234, 2N4235
2N4236



TO-39
Metal Can Package

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless specified otherwise)

SMALL SIGNAL CHARACTERISTICS

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter Saturation Voltage	* $V_{CE(sat)}$	$I_C=1\text{A}, I_B=125\text{mA}$			0.6	V
Base Emitter Saturation Voltage	* $V_{BE(sat)}$	$I_C=1\text{A}, I_B=0.1\text{A}$			1.5	V
Base Emitter On Voltage	* $V_{BE(on)}$	$I_C=250\text{mA}, V_{CE}=1\text{V}$			1.0	V

SMALL SIGNAL CHARACTERISTICS

Output Capacitance	C_{obo}	$V_{CB}=10\text{V}, I_E=0,$ $f=100\text{KHz}$			100	pF
Small Signal Current Gain	h_{fe}	$I_C=50\text{mA}, V_{CE}=10\text{V},$ $f=1\text{KHz}$	25			
Current Gain Bandwidth Product	f_T	$I_C=100\text{mA}, V_{CE}=10\text{V},$ $f=1\text{MHz}$	3.0			MHz

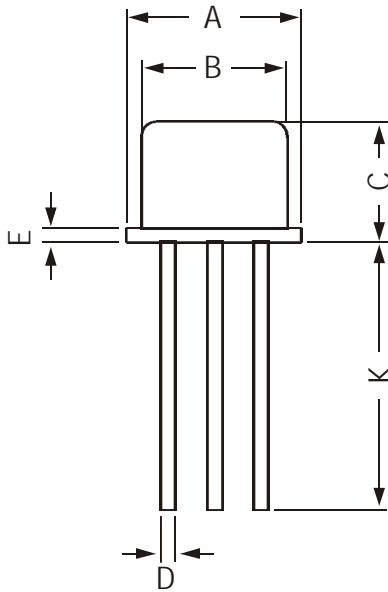
*Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

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**2N4234, 2N4235
2N4236**

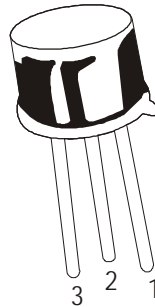
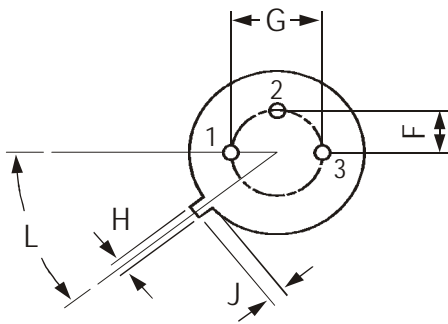
**TO-39
Metal Can Package**

TO-39 Metal Can Package



All dimensions are in mm

DIM	MIN	MAX
A	8.50	9.39
B	7.74	8.50
C	6.09	6.60
D	0.40	0.53
E	—	0.88
F	2.41	2.66
G	4.82	5.33
H	0.71	0.86
J	0.73	1.02
K	12.70	—
L	42 DEG	48 DEG



PIN CONFIGURATION

1. EMITTER
2. BASE
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-39	500 pcs/polybag	540 gm/500 pcs	3" x 7.5" x 7.5"	20K	17" x 15" x 13.5"	32K	40 kgs

Disclaimer

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