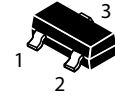
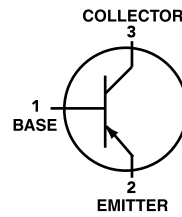


### PNP General Purpose Transistors

 Lead(Pb)-Free



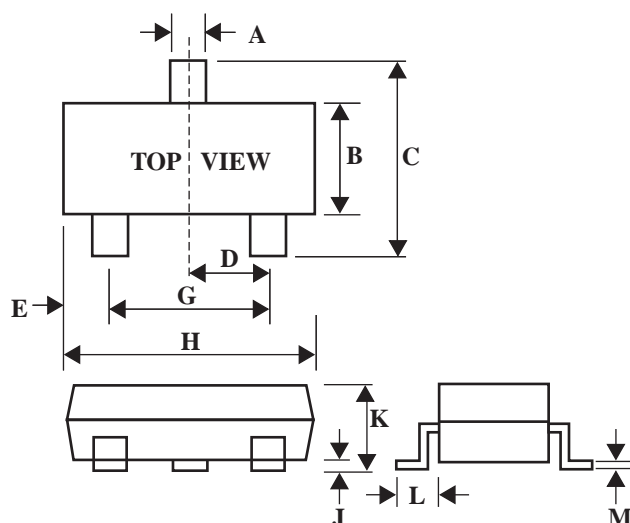
**SOT-323**

#### MAXIMUM RATINGS(T<sub>a</sub>=25°C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CB0</sub>	-35	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-30	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5.0	V
Collector Current - Continuous	I <sub>C</sub>	-500	mA
Total Device Dissipation T <sub>A</sub> =25°C	P <sub>D</sub>	100	mW
Junction Temperature	T <sub>j</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

### SOT-323 Outline Dimension

Unit:mm



SOT-323		
Dim	Min	Max
A	0.30	0.40
B	1.15	1.35
C	2.00	2.40
D	-	0.65
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.00	0.10
K	0.80	1.00
L	0.42	0.53
M	0.10	0.25

## ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage $I_C = -100\mu\text{A}, I_E = 0\text{A}$	$V_{(BR)CBO}$	-35	-	-	V
Collector-Emitter Breakdown Voltage $I_C = -1\text{mA}, I_B = 0\text{A}$	$V_{(BR)CEO}$	-30	-	-	V
Emitter-Base Breakdown Voltage $I_E = -100\mu\text{A}, I_C = 0\text{A}$	$V_{(BR)EBO}$	-5.0	-	-	V
Collector Cutoff Current $V_{CB} = -35\text{V}, I_E = 0\text{A}$	$I_{CBO}$	-	-	-0.1	$\mu\text{A}$
Emitter Cutoff Current $V_{EB} = -5\text{V}, I_C = 0\text{A}$	$I_{EBO}$	-	-	-0.1	$\mu\text{A}$

## ON CHARACTERISTICS

Collector-Emitter Saturation Voltage $I_C = -100\text{mA}, I_B = -10\text{mA}$	$V_{CE(sat)}$	-	-	-0.25	V
DC Current Transfer Ratio $V_{CE} = -1\text{V}, I_C = -100\text{mA}$	$h_{FE}$	70	-	240	

## SMALL-SIGNAL CHARACTERISTICS

Transition frequency $V_{CE} = -6\text{V}, I_C = -20\text{mA}$	$f_T$	-	200	-	MHz
Collector output capacitance $V_{CB} = -6\text{V}, I_E = 0, f = 1\text{MHz}$	$C_{ob}$	-	13	-	pF

CLASSIFICATION  $h_{FE}$ 

Rank	O	Y
Range	70-140	120-240
Marking	ZO	ZY