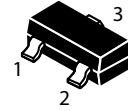
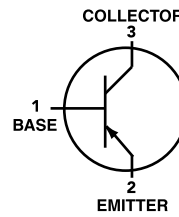


PNP General Purpose Transistors

 Lead(Pb)-Free



SOT-23

MAXIMUM RATINGS(Ta=25°C)

Rating	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-100	mA
Total Device Dissipation $T_A=25^\circ\text{C}$	P_D	200	mW
Junction Temperature	T_j	+150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage $I_C = -100\mu\text{A}, I_E = 0\text{A}$	$V_{(BR)CBO}$	-60	-	-	V
Collector-Emitter Breakdown Voltage $I_C = -1\text{mA}, I_B = 0\text{A}$	$V_{(BR)CEO}$	-50	-	-	V
Emitter-Base Breakdown Voltage $I_E = 100\mu\text{A}, I_C = 0$	$V_{(BR)EBO}$	-5.0	-	-	V
Collector Cutoff Current $V_{CB} = -60\text{V}, I_E = 0\text{A}$	I_{CBO}	-	-	-0.1	μA
Emitter Cutoff Current $V_{EB} = -5\text{V}, I_C = 0\text{A}$	I_{EBO}	-	-	-0.1	μA

ON CHARACTERISTICS

Collector-Emitter Saturation Voltage $I_C = -100\text{mA}, I_B = -10\text{mA}$	$V_{CE(sat)}$	-	-	-0.3	V
Collector-Emitter Voltage $I_C = -1\text{mA}, V_{CE} = -6\text{V}$,	$V_{BE(on)}$	-	-	-0.68	V
DC Current Transfer Ration $V_{CE} = -6\text{V}, I_C = -1\text{mA}$	h_{FE}	90	-	600	

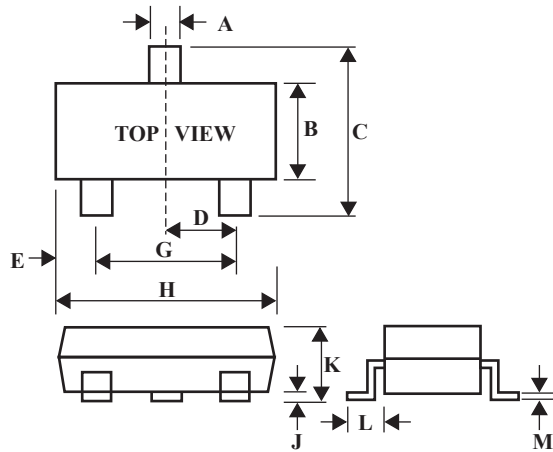
SMALL-SIGNAL CHARACTERISTICS

Transition frequency $V_{CE} = -6\text{V}, I_C = -10\text{mA}$	f_T	180	-	-	MHz
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CLASSIFICATION h_{FE}

Range	90-180	135-270	200-400	300-600
Marking	M4	M5	M6	M7

SOT-23 Outline Dimension



SOT-23		
Dim	Min	Max
A	0.35	0.51
B	1.19	1.40
C	2.10	3.00
D	0.85	1.05
E	0.46	1.00
G	1.70	2.10
H	2.70	3.10
J	0.01	0.13
K	0.89	1.10
L	0.30	0.61
M	0.076	0.25