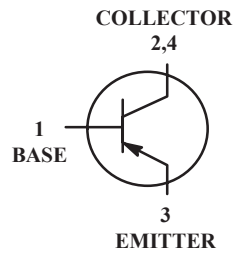
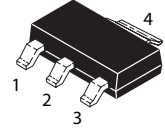


High-Voltage PNP Transistor Surface Mount

 Lead(Pb)-Free



1.BASE
2.COLLECTOR
3.EMITTER
4.COLLECTOR



SOT-223

Maximum Ratings

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V _{CEO}	-400	V _{dc}
Collector-Base Voltage	V _{CBO}	-400	V _{dc}
Emitter-Base Voltage	V _{EBO}	-6.0	V _{dc}
Collector Current-Continuous	I _C	-500	mA _{dc}
Total Device Dissipation	P _D	2.0	W
Junction and Storage, Temperature	T _J , T _{stg}	-55 to +150	°C

Device Marking

PZTA94 = A94

Electrical Characteristics (T_A=25°C Unless Otherwise noted)

Characteristics	Symbol	Min	Max	Unit
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Off Characteristics

Collector-Emitter Breakdown Voltage (I _C =-1.0mA _{dc} , I _B =0)	V _{(BR)CEO}	-400	-	V _{dc}
Collector-Base Breakdown Voltage (I _C =-100 μA _{dc} , I _E =0)	V _{(BR)CBO}	-400	-	V _{dc}
Emitter-Base Breakdown Voltage (I _E =-100 μA _{dc} , I _C =0)	V _{(BR)EBO}	-6.0	-	V _{dc}
Collect Cutoff Current (V _{CB} = -400V _{dc} , I _E =0)	I _{CBO}	-	-100	nA _{dc}
Emitte Cutoff Current (V _{EB} =-6V, I _C =0)	I _{EBO}	-	-100	nA _{dc}

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted) (Continued)

Characteristics	Symbol	Min	Max	Unit
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On Characteristics¹

DC Current Gain ($I_C = -1.0\text{ mAdc}$, $V_{CE} = -10\text{ Vdc}$)	$H_{FE(1)}$	40	-	-
($I_C = -10\text{ mAdc}$, $V_{CE} = -10\text{ Vdc}$)	$H_{FE(2)}$	50	300	-
($I_C = -50\text{ mAdc}$, $V_{CE} = -10\text{ Vdc}$)	$H_{FE(3)}$	45	-	-
($I_C = -100\text{ mAdc}$, $V_{CE} = -10\text{ Vdc}$)	$H_{FE(4)}$	40	-	-
Collector-Emitter Saturation Voltage ($I_C = -1.0\text{ mAdc}$, $I_B = -0.1\text{ mAdc}$)	$V_{CE(sat)}$	-	0.35	Vdc
($I_C = -10\text{ mAdc}$, $I_B = -1.0\text{ mAdc}$)			0.50	
($I_C = -50\text{ mAdc}$, $I_B = -5.0\text{ mAdc}$)			0.75	
Base-Emitter Saturation Voltage ($I_C = -10\text{ mAdc}$, $I_B = -1.0\text{ mAdc}$)	$V_{BE(sat)}$	-	0.75	Vdc

Note: 1. Pulse Test : Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$.

Characteristics Curve

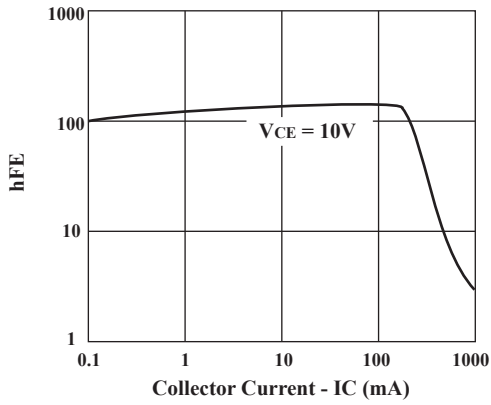


Fig.1 Current Gain & Collector Current

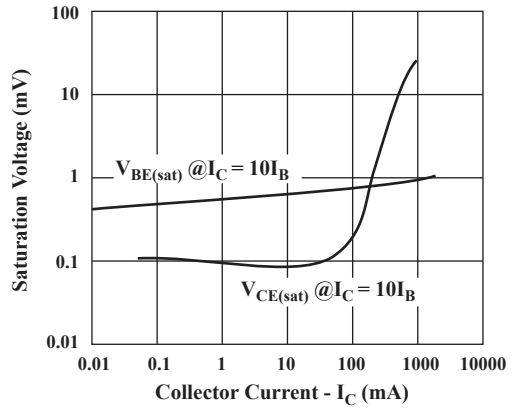


Fig.2 Saturation Voltage & Collector Current

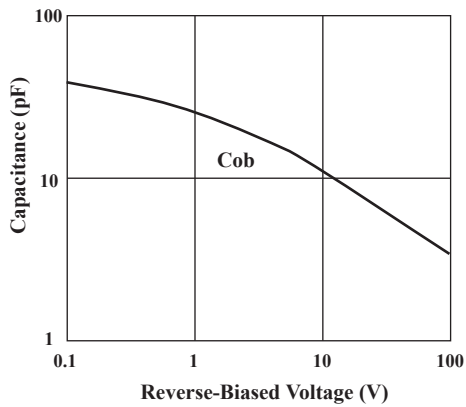
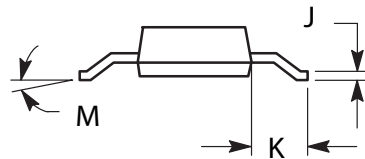
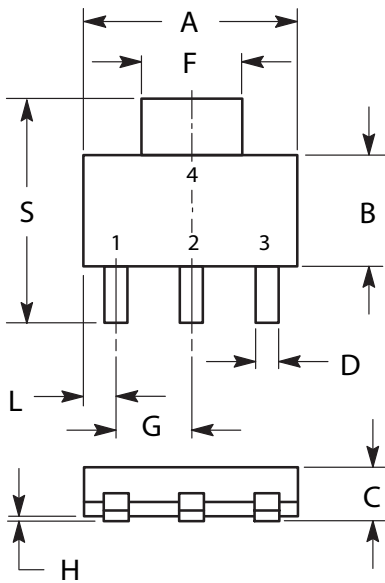


Fig.3 Capacitance & Reverse-Biased Voltage

SOT-223 Outline Dimensions

unit:mm



DIM	MILLIMETERS	
	MIN	MAX
A	6.30	6.70
B	3.30	3.70
C	1.50	1.75
D	0.60	0.89
F	2.90	3.20
G	2.20	2.40
H	0.020	0.100
J	0.24	0.35
K	1.50	2.00
L	0.85	1.05
M	0°	10°
S	6.70	7.30