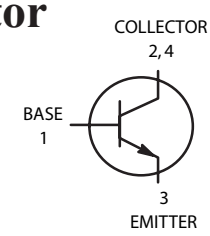
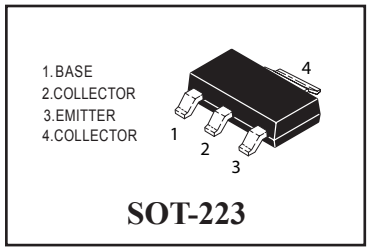
WEITRON

PZTA44

NPN Silicon Planar Epitaxial Transistor

Lead(Pb)-Free





SOT-223

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	400	V
Collector-Base Voltage	V_{CBO}	500	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current (DC)	$I_{C(DC)}$	300	mA
Total Device Disspation T_A=25°C	P_D	2	W
Junction Temperature	Tj	150	°C
Storage, Temperature	Tstg	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage (I_C=1mA)	$V_{(BR)CEO}$	400	-	-	V
Collector-Base Breakdown Voltage (I_C=100μA)	$V_{(BR)CBO}$	500	-	-	V
Emitter-Base Breakdown Voltage (I_E=10 μA)	$V_{(BR)EBO}$	6	-	-	V
Collector-Emitter Cutoff Current (V_{CB}=400V)	I_{CBO}	-	-	100	nA
Collector Cutoff Current (V_{CB}=400V)	I_{CES}	-	-	500	nA
Emitter-Base Cutoff Current (V_{EB}=4V)	I_{EBO}	-	-	100	nA
DC Current Gain (V_{CE} = 10V, I_C = 1mA) (V_{CE} = 10V, I_C = 10mA) (V_{CE} = 10V, I_C = 50mA) (V_{CE} = 10V, I_C = 100mA)	 h_{FE1} h_{FE2} h_{FE3} h_{FE4}	 40 50 45 40	 - - - -	 - 300 - -	-
Collector-Emitter Saturation Voltages (I_C = 20mA, I_B = 2mA) (I_C = 50mA, I_B = 5mA)	$V_{CE(sat)}$	 - -	 - -	 375 750	mV
Base-Emitter Saturation Voltages (I_C = 10mA, I_B = 1mA)	$V_{BE(sat)}$	-	-	750	mV
Output Capacitance (V_{CE} = 20 Vdc, f = 1MHz)	C_{ob}	-	4	6	pF

Device Marking

PZTA44=44

Characteristics Curve

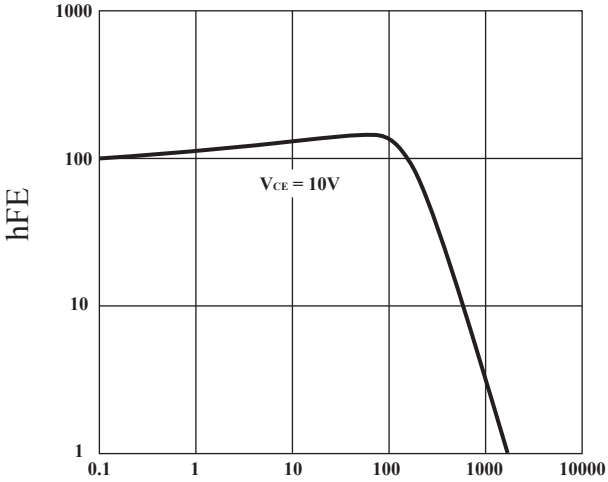


Fig.1 Current Gain & Collector Current

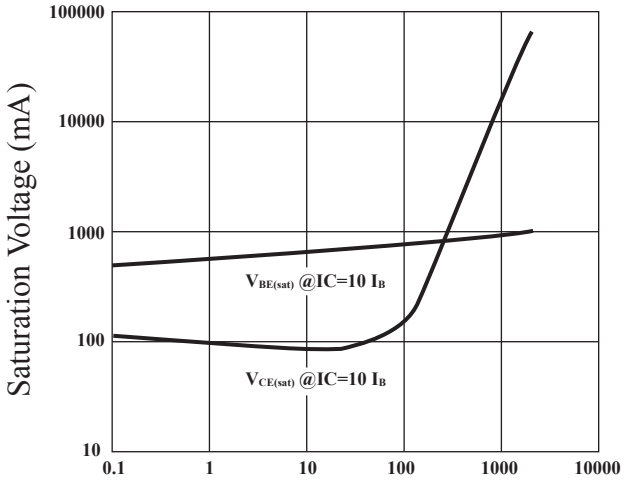


Fig.2 Saturation Voltage & Collector Current

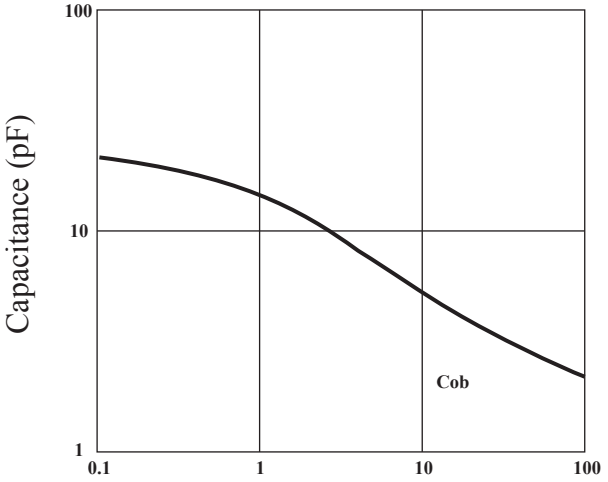


Fig.3 Capacitance & Reverse-Biased Voltage

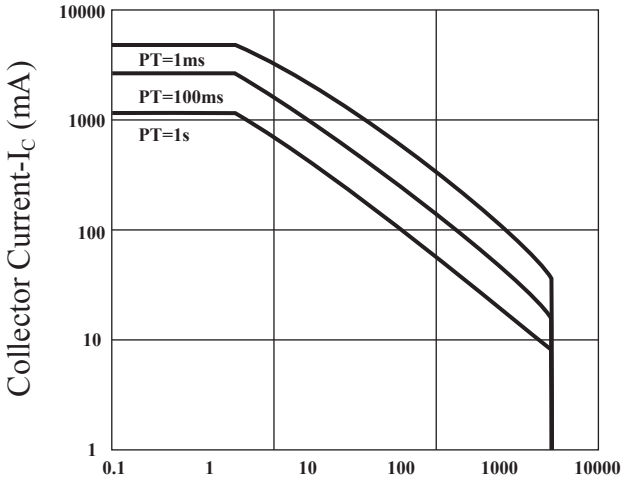
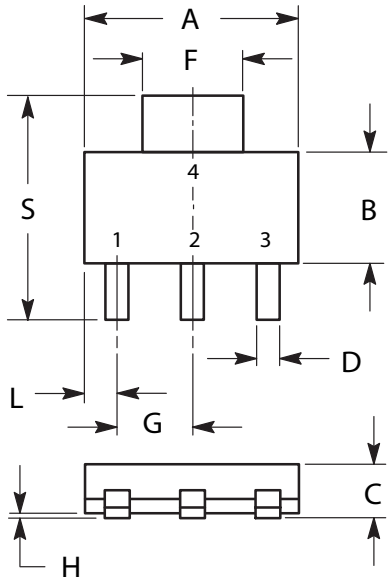
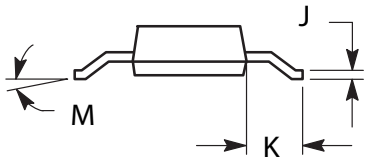


Fig.4 Safe Operation Area

SOT-223 Outline Dimensions

unit:mm





	MILLIMETERS	
DIM	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