



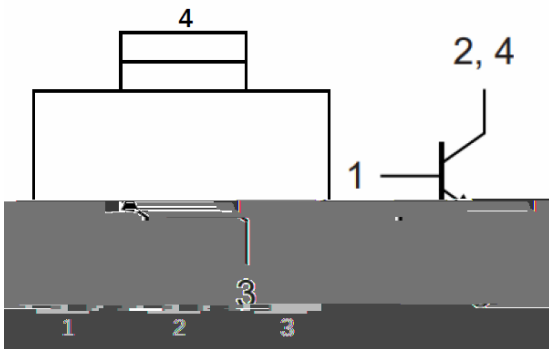
PZT5551

NPN Transistor

Features

Marking: ZT5551

Equivalent circuit



Maximum Ratings (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	V_{CE0}	V	$I_C=1mA, I_B=0$	160
M	EBO	V	$I_E=10uA, I_C=0$	6
Collector Current	I_{2u2E}			

PZT5551

Electrical Characteristics (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Voltage	V_{CE0}	V	$I_C=1mA_{dc}, I_B=0$	160	-
Collector-Base Voltage	V_{CB0}	V	$I_C=100\mu A_{dc}, I_E=0$	180	-
Emitter-Base Voltage	V_{EB0}	V	$I_E=10\mu A_{dc}, I_C=0$	6.0	-
Collector-base Cut-off Current	I_{CB0}	nA	$V_{CB}=120V_{dc}$	-	50
Emitter-base Cut-off Current	I_{EB0}	nA	$V_{EB}=4.0V_{dc}$	-	50
DC Current Gain	h_{FE}		$I_C=1.0mA, V_{CE}=5.0V_{dc}$	80	-
			$I_C=10mA, V_{CE}=5.0V_{dc}$	80	250
			$I_C=50mA, V_{CE}=5.0V_{dc}$	30	-
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	V	$I_C=10mA, I_B=1.0mA$	-	0.15
	$V_{CE(sat)2}$	V	$I_C=50mA, I_B=5.0mA$	-	0.2
Base-Emitter Saturation Voltage	$V_{BE(sat)1}$	V	$I_C=10mA, I_B=1.0mA$	-	1
	$V_{BE(sat)2}$	V	$I_C=50mA, I_B=5.0mA$	-	1
Output Capacitance	C_{ob}	pF	$V_{CB}=10V_{dc}, \dot{I}_E=0, \dot{f}=1MHz$	-	6
Transition frequency	f_T	MHz	$I_C=10mA_{dc}, V_{CE}=5.0V_{dc}, f=30MHz$	100	300

Ordering Information (Example)

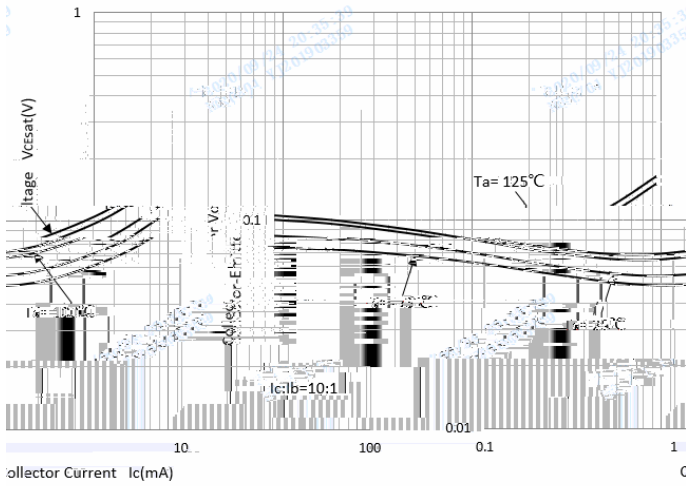
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
PZT5551	F2	Approximate 0.11	2500	5000	25000	13" reel

Characteristics (Typical)

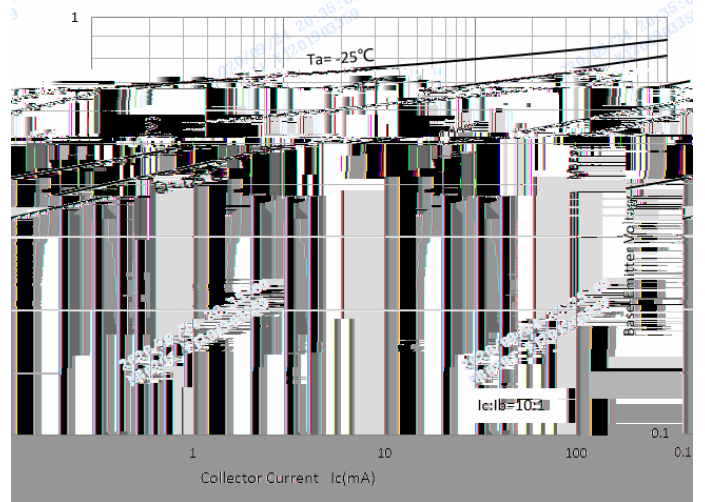


PZT5551

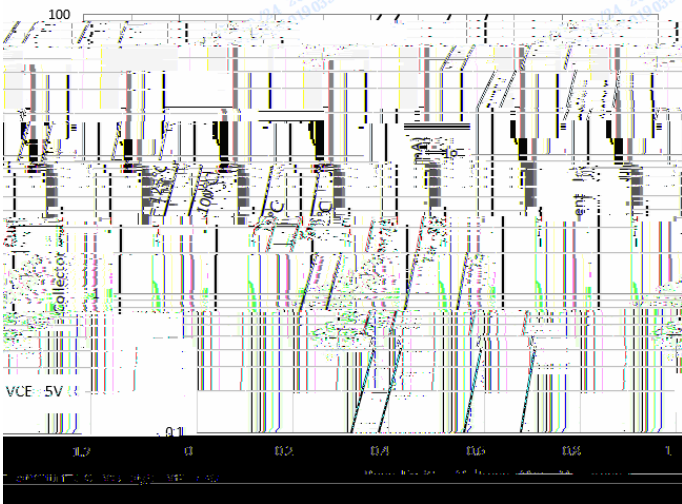
Collector-Emitter Saturation Voltage



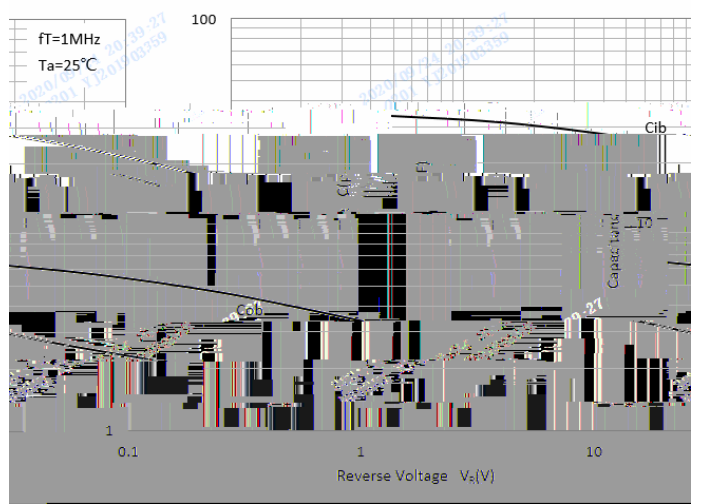
Base-Emitter Saturation Voltage



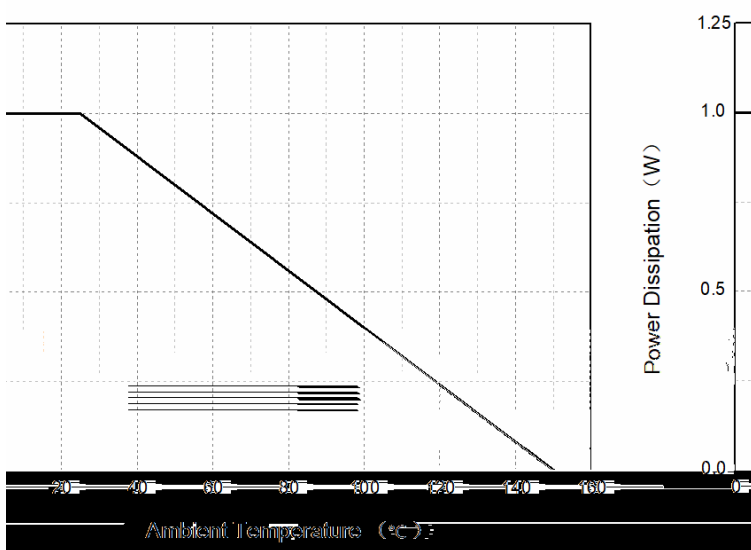
Base-Emitter On Voltage



C_{ob}/C_{ib} vs V_{ce}

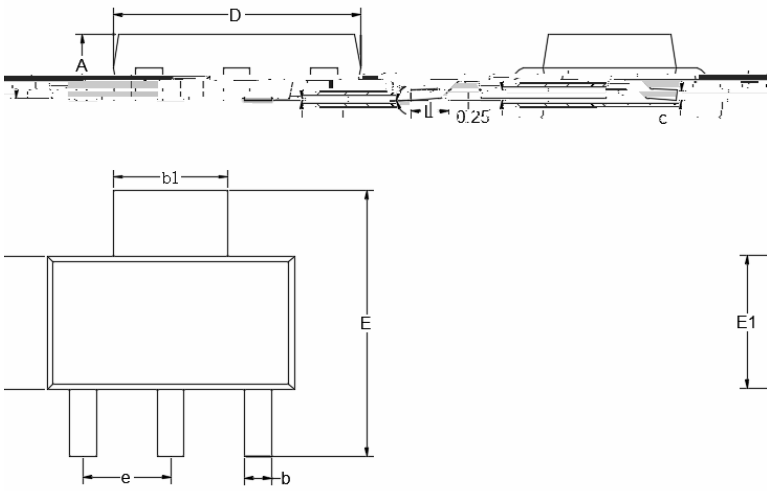


Power Derating Curve



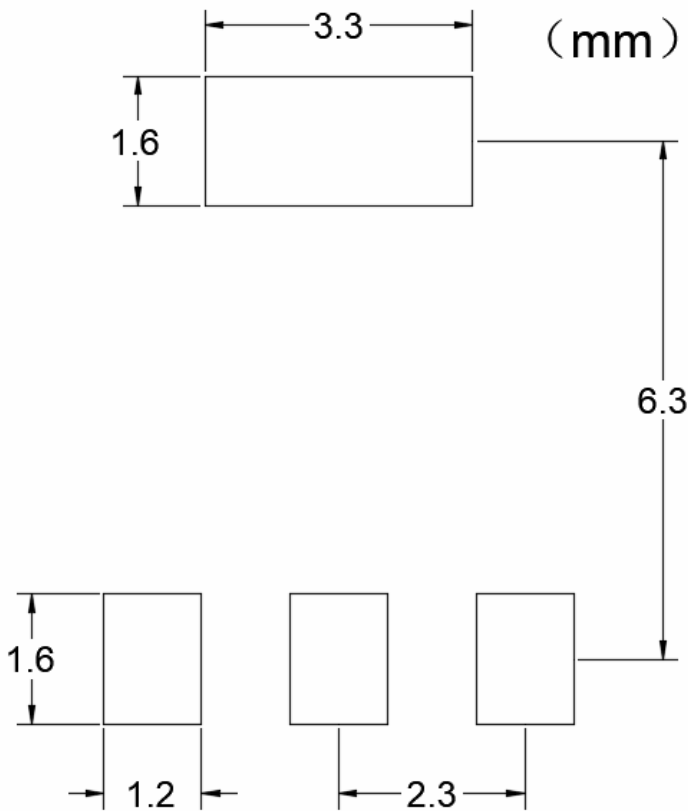


SOT-223 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.0591	0.0670	1.5000	1.7000
D	0.0000	0.0010	0.0000	0.0254
b ₁	0.0000	0.0010	0.0000	0.0254
E	0.0000	0.0010	0.0000	0.0254
e	0.0000	0.0010	0.0000	0.0254
b	0.0000	0.0010	0.0000	0.0254
E ₁	0.0000	0.0010	0.0000	0.0254
L	0.0000	0.0010	0.0000	0.0254
W	0.0000	0.0010	0.0000	0.0254
W ₁	0.0000	0.0010	0.0000	0.0254
W ₂	0.0000	0.0010	0.0000	0.0254
W ₃	0.0000	0.0010	0.0000	0.0254
W ₄	0.0000	0.0010	0.0000	0.0254
W ₅	0.0000	0.0010	0.0000	0.0254
W ₆	0.0000	0.0010	0.0000	0.0254
W ₇	0.0000	0.0010	0.0000	0.0254
W ₈	0.0000	0.0010	0.0000	0.0254
W ₉	0.0000	0.0010	0.0000	0.0254
W ₁₀	0.0000	0.0010	0.0000	0.0254
W ₁₁	0.0000	0.0010	0.0000	0.0254
W ₁₂	0.0000	0.0010	0.0000	0.0254
W ₁₃	0.0000	0.0010	0.0000	0.0254
W ₁₄	0.0000	0.0010	0.0000	0.0254
W ₁₅	0.0000	0.0010	0.0000	0.0254
W ₁₆	0.0000	0.0010	0.0000	0.0254
W ₁₇	0.0000	0.0010	0.0000	0.0254
W ₁₈	0.0000	0.0010	0.0000	0.0254
W ₁₉	0.0000	0.0010	0.0000	0.0254
W ₂₀	0.0000	0.0010	0.0000	0.0254

SOT-223 Suggested Pad Layout





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