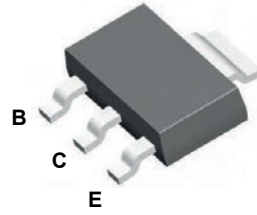
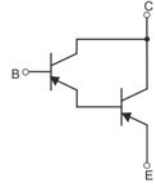


Features

- Complementary to PZT122
- Silicon power darlington transistors
- Low speed switching and amplifier applications



SOT-223



Schematic Diagram

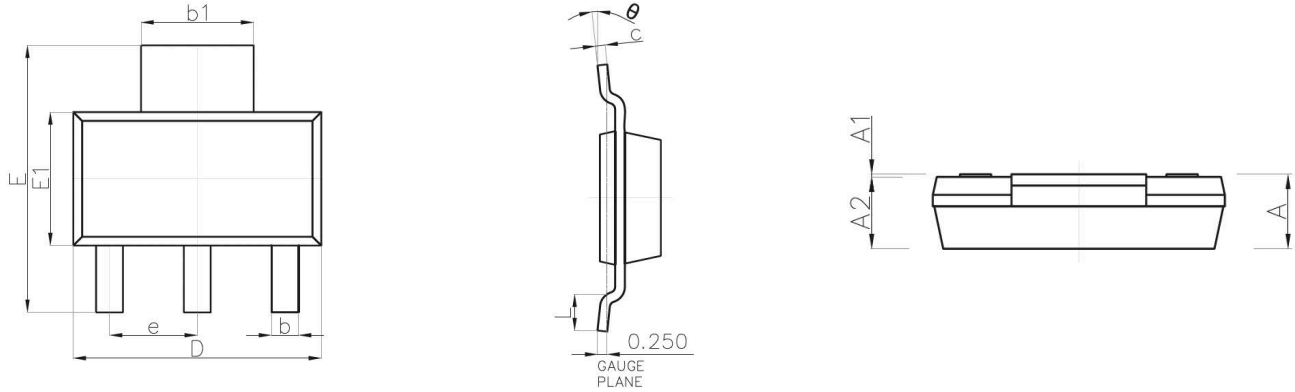
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-5	A
Collector Power Dissipation	P_C	1	W
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

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

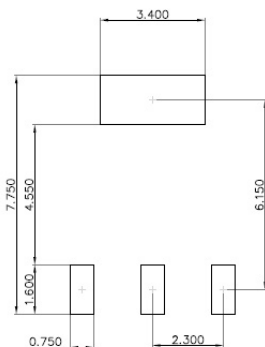
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-1\text{mA}, I_E=0$	-100	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-30\text{mA}, I_B=0$	-100	-	-	V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-100\text{V}, I_E=0$	-	-	-200	μA
Base Cut-Off Current	I_{CEO}	$V_{CE}=-50\text{V}, I_B=0$	-	-	-500	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$	-	-	-2	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-3\text{V}, I_C=-0.5\text{A}$	1000	-	-	-
	$h_{FE(2)}$	$V_{CE}=-3\text{V}, I_C=-3\text{A}$	1000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=-3\text{A}, I_B=-12\text{mA}$	-	-	-2	V
	$V_{CE(sat)2}$	$I_C=-5\text{A}, I_B=-20\text{mA}$	-	-	-4	V
Base-Emitter Voltage	$V_{BE(on)}$	$V_{CE}=-3\text{V}, I_C=-3\text{A}$	-	-	-2.5	V
Transition Frequency	f_T	$V_{CE}=-4\text{V}, I_C=-3\text{A}, F=1\text{MHz}$	4	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, F=1.0\text{MHz}$	-	-	200	pF

Package Outline Dimensions (SOT-223)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	-	1.800	-	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E1	3.300	3.700	0.130	0.146
e	2.300 (BSC)		0.091 (BSC)	
L	0.750	-	0.030	-
θ	0°	10°	0°	10°

Recommended Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Order Information

Device	Package	Reel Size	Quantity	HSF Status
PZT127	SOT-223	13"	2,500pcs / Reel	RoHS Compliant