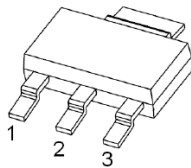


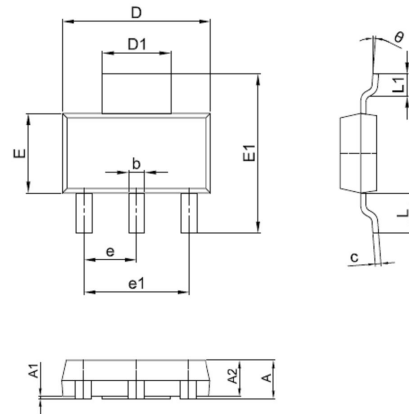
### Feature

Epitaxial planar die construction  
 Complementary PNP Type available (PZT2907A)

SOT-223



- 1. BASE
- 2. COLLECTOR
- 3. EMITTER



Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.50	1.80	0.059	0.071
A1	0.00	0.10	0.000	0.004
A2	1.50	1.70	0.059	0.067
b	0.65	0.75	0.026	0.030
c	0.20	0.30	0.008	0.012
D	6.40	6.60	0.252	0.260
D1	2.90	3.10	0.114	0.122
E	3.30	3.70	0.130	0.146
E1	6.85	7.15	0.270	0.281
e	2.20	2.40	0.087	0.094
e1	4.40	4.80	0.173	0.189
L	1.65	1.85	0.065	0.073
L1	0.90	1.15	0.035	0.045

### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CB0</sub>	Collector-Base Voltage	75	V
V <sub>CEO</sub>	Collector-Emitter Voltage	40	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current -Continuous	600	mA
P <sub>C</sub>	Collector Power Dissipation	1	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-55~ +150	°C

# PZT2222A

## ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 10μ A, I <sub>E</sub> =0	75		V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = 10mA, I <sub>B</sub> =0	40		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =10μA, I <sub>C</sub> =0	6		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0		10	nA
Collector cut-off current	I <sub>CEX</sub>	V <sub>CE</sub> =60V, V <sub>BE(off)</sub> =3V		10	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 3V , I <sub>C</sub> =0		10	nA
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 0.1mA	35		
	h <sub>FE(2)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 1mA	50		
	h <sub>FE(3)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 10mA	75		
	h <sub>FE(4)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 150mA	100	300	
	h <sub>FE(5)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> = 150mA	50		
	h <sub>FE(6)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 500mA	40		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> = 50mA		1	V
	V <sub>CE(sat)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> = 15mA		0.3	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> = 50mA		2.0	V
	V <sub>BE(sat)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		1.2	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =20V, I <sub>C</sub> = 20mA, f=100MHz	300		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> = 0, f=1MHz		8	pF
Delay time	t <sub>d</sub>	V <sub>CC</sub> =30V, I <sub>C</sub> =150mA		10	ns
Rise time	t <sub>r</sub>	V <sub>BE(off)</sub> =0.5V, I <sub>B1</sub> =15mA		25	ns
Storage time	t <sub>s</sub>	V <sub>CC</sub> =30V, I <sub>C</sub> =150mA		225	ns
Fall time	t <sub>f</sub>	I <sub>B1</sub> =-I <sub>B2</sub> = 15mA		60	ns

# RATING AND CHARACTERISTIC CURVES (PZT2222A)

