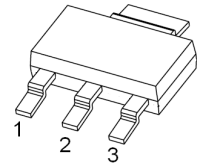


Features

- Epitaxial planar die construction
- Complementary PNP type available (PZT2907A)

Absolute Maximum Ratings (T_A = 25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	75	V
Collector-Emitter Voltage	V _{CEO}	40	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current - Continuous	I _C	600	mA
Collector Power Dissipation	P _C	1	W
Junction Temperature	T _J	-55 to +150	°C
Storage Temperature	T _{STG}	-55 to +150	°C



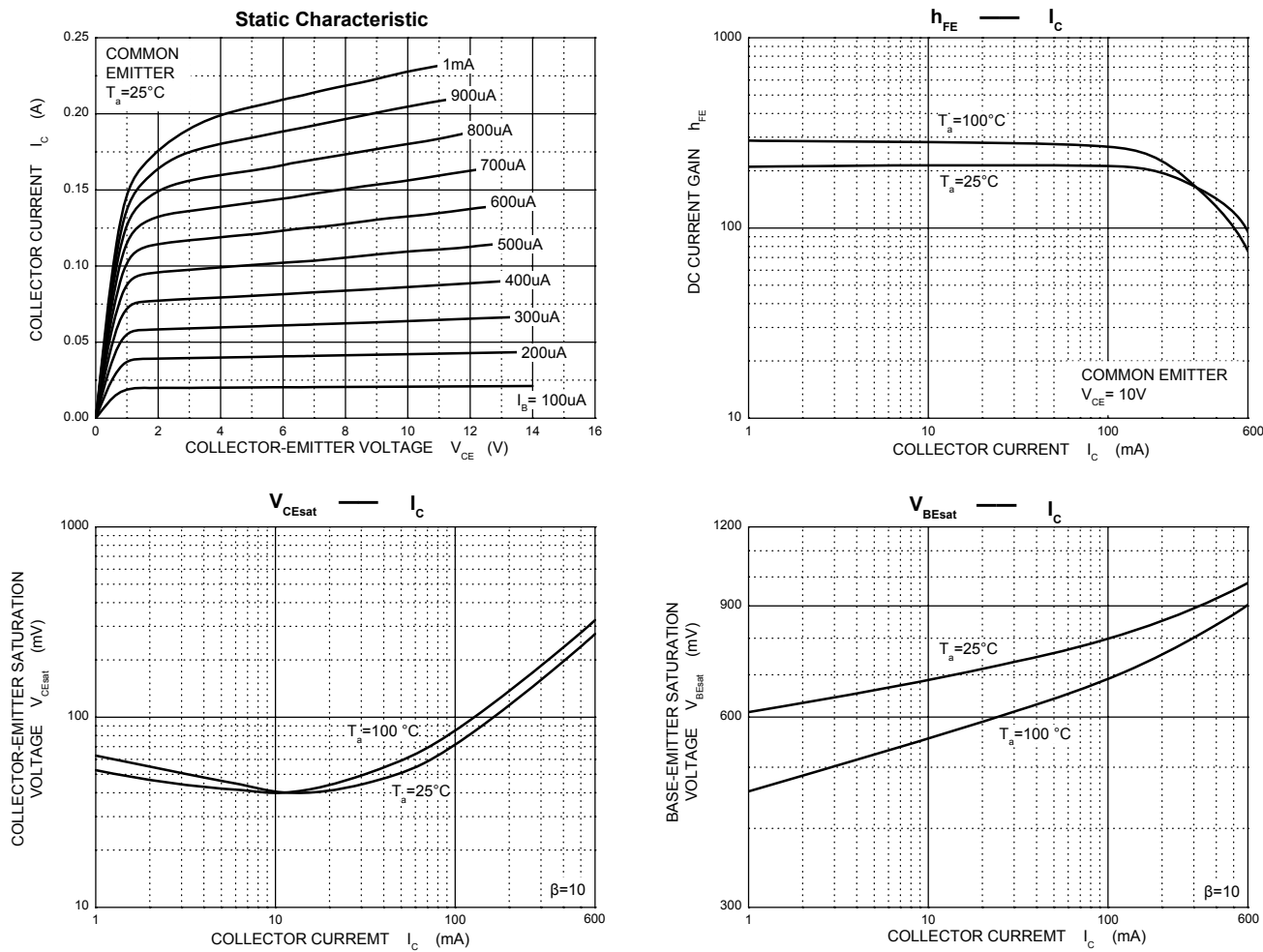
SOT-223

1. BASE
2. COLLECTOR
3. EMITTER

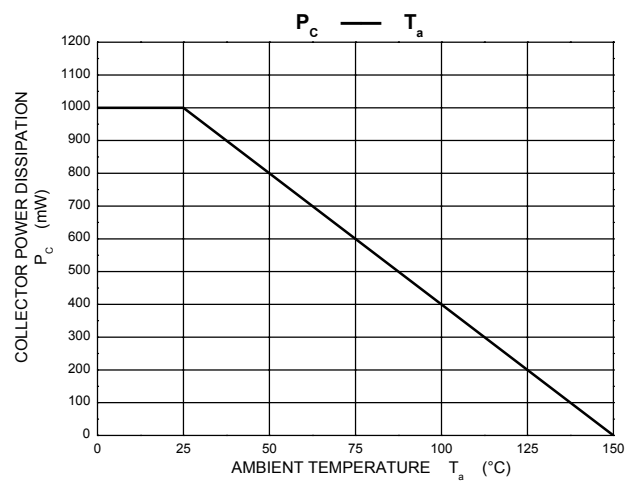
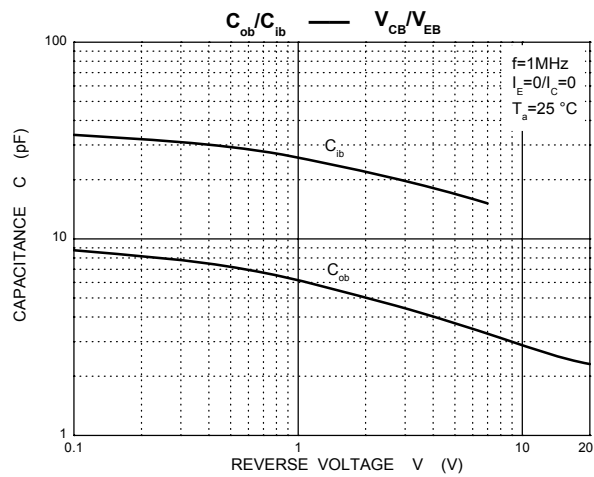
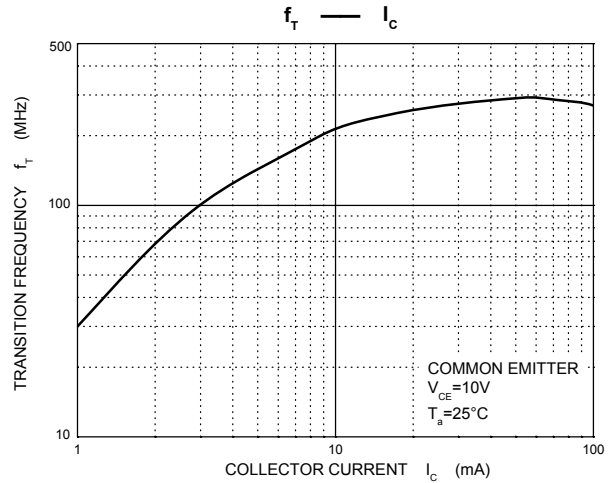
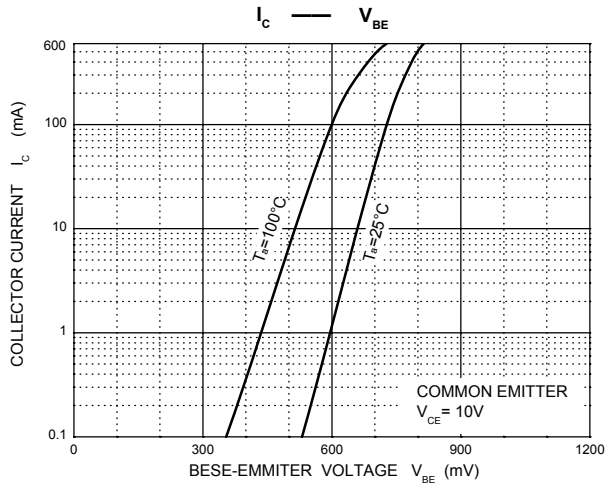
Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	V _{(BR)CBO}	I _C = 10 μA, I _E = 0	75	-	V
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	I _C = 10mA, I _B = 0	40	-	V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	6	-	V
Collector Cut-Off Current	I _{CBO}	V _{CB} = 60V, I _E = 0	-	10	nA
Collector Cut-Off Current	I _{CEX}	V _{CE} = 60V, V _{BE(off)} = 3V	-	10	nA
Emitter Cut-Off Current	I _{EBO}	V _{EB} = 3V, I _C = 0	-	10	nA
DC Current Gain	h _{FE(1)}	V _{CE} = 10V, I _C = 0.1mA	35	-	-
	h _{FE(2)}	V _{CE} = 10V, I _C = 1mA	50	-	-
	h _{FE(3)}	V _{CE} = 10V, I _C = 10mA	75	-	-
	h _{FE(4)}	V _{CE} = 10V, I _C = 150mA	100	300	-
	h _{FE(5)}	V _{CE} = 1V, I _C = 150mA	50	-	-
	h _{FE(6)}	V _{CE} = 10V, I _C = 500mA	40	-	-
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 500mA, I _B = 50mA	-	1	V
	V _{CE(sat)}	I _C = 150mA, I _B = 15mA	-	0.3	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C = 500mA, I _B = 50mA	-	2.0	V
	V _{BE(sat)}	I _C = 150mA, I _B = 15mA	-	1.2	V
Transition Frequency	f _T	V _{CE} = 20V, I _C = 20mA, f = 100MHz	300	-	MHz
Output Capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz	-	8	pF
Delay Time	t _d	V _{CC} = 30V, I _C = 150mA V _{BE(off)} = 0.5V, I _{B1} = 15mA	-	10	nS
Rise Time	t _r		-	25	nS
Storage Time	t _s	V _{CC} = 30V, I _C = 150mA I _{B1} = -I _{B2} = 15mA	-	225	nS
Fall Time	t _f		-	60	nS

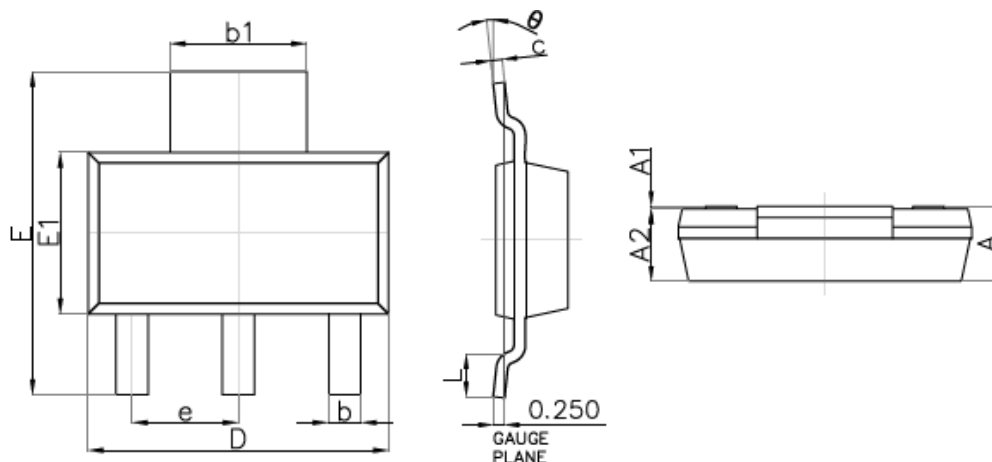
Typical Characteristic Curves



Typical Characteristic Curves

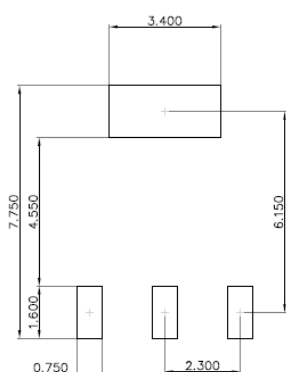


Package Outline Dimensions SOT-223



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°

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.050 mm.
3. The pad layout is for reference purposes only.

Ordering Information

Device	Package	Marking	Quantity	HSF Status
PZT2222A	SOT-223	ZT2222A	2,500pcs / Reel	RoHS Compliant