

RoHS Compliant Product

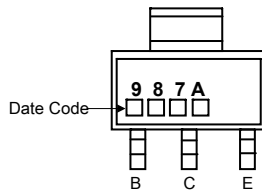
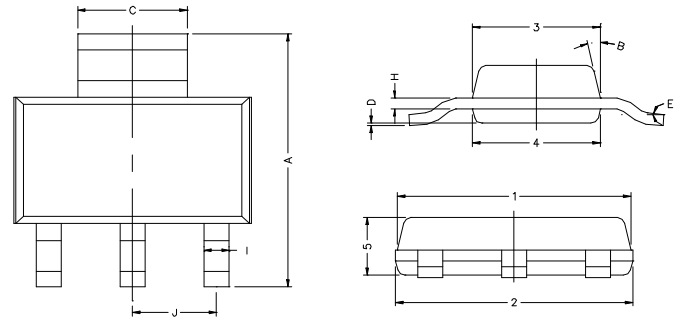
SOT-223

Description

The PZT987A is designed for battery powered circuits and fast charge converters.

Features

- * Gain Of 200 At $I_c=2A$ And Very Low Saturation Voltage



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.70	7.30	B	13 TYP.	
C	2.90	3.10	J	2.30 REF.	
D	0.02	0.10	1	6.30	6.70
E	0°	10°	2	6.30	6.70
I	0.60	0.80	3	3.30	3.70
H	0.25	0.35	4	3.30	3.70
			5	1.40	1.80

MAXIMUM RATINGS* (T_{amb}=25°C, unless otherwise specified)

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	-25	V
V _{CEO}	Collector-Emitter Voltage	-25	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current (DC)	-3	A
I _{CM}	Collector Current (Pulse)	-6	A
P _D	Total Power Dissipation	2	W
T _J , T _{stg}	Junction and Storage Temperature	-55~+150	°C

*The power which can be dissipated assuming the device is mounted in a typical on a P.C.B. with copper equal to 4 square inch min..

ELECTRICAL CHARACTERISTICS T_{amb}=25°C unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CBO}	-25	-	-	V	I _C =-100μA, I _E =0
Collector-Emitter Breakdown Voltage	*BV _{CEO}	-25	-	-	V	I _C =-10mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EBO}	-5	-	-	V	I _E =-100μA, I _C =0
Collector-Base Cutoff Current	I _{CBO}	-	-	-100	nA	V _{CB} =-15V, I _E =0
Emitter-Base Cutoff Current	I _{EBO}	-	-	-100	nA	V _{EB} =-4V, I _C =0
Collector Saturation Voltage	*V _{CE(sat)1}	-	-	-250	mV	I _C =-1A, I _B =-10 mA
	*V _{CE(sat)2}	-	-	-450		I _C =-2A, I _B =-20mA
	*V _{CE(sat)3}	-	-	-500		I _C =-3A, I _B =-100mA
Base Saturation Voltage	*V _{BE(sat)}	-	-	-1	V	I _C =-1A, I _B =-10mA
Base-Emitter Voltage	*V _{BE(on)}	-	-0.8	-	V	I _C =-1A, V _{CE} =-2V
DC Current Gain	*h _{FE1}	300	-	800		V _{CE} =-2V, I _C =-10 mA
	*h _{FE2}	250	-	-		V _{CE} =-2V, I _C =-1 A
	*h _{FE3}	200	-	-		V _{CE} =-2V, I _C =-2A
	*h _{FE4}	100	-	-		V _{CE} =-2V, I _C =-6A
Gain-Bandwidth Product	f _T	100	-	-	MHz	V _{CE} =-5V, I _C =-50 mA, f=50MHz
Input Capacitance	C _{ib}	-	225	-	pF	V _{CB} =-0.5V, f=1MHz
Output Capacitance	C _{ob}	-	25	-	pF	V _{CB} =-10V, f=1MHz
On-Time	T _{on}	-	35	-	nS	V _{CC} =-10V, I _C =-500mA, I _{B1} =I _{B2} =-50mA
Off-Time	T _{off}	-	400	-		

*Measured under pulse condition. Pulse width= 300μs, Duty Cycle ≤2%

Characteristics Curve

