

RoHS Compliant Product

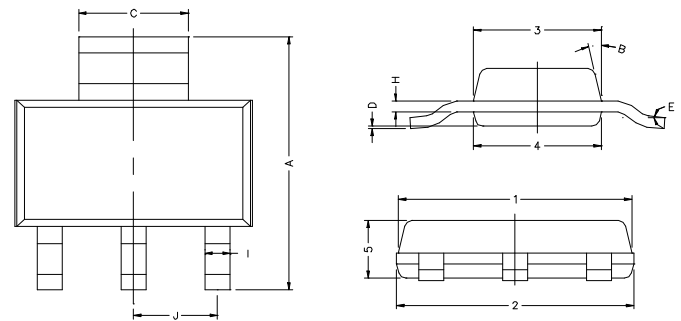
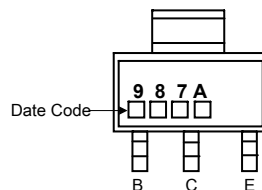
SOT-223

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* ($T_{amb}=25^{\circ}C$, 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	$^{\circ}C$

*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 $T_{amb}=25^{\circ}C$ unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	-25	-	-	V	$I_c=-100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	* BV_{CEO}	-25	-	-	V	$I_c=-10mA, I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	-5	-	-	V	$I_E=-100\mu A, I_c=0$
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	$I_c=-1A, I_B=-10mA$
	* $V_{CE(sat)2}$	-	-	-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		$V_{CE}=-2V, I_c=-10mA$
	* h_{FE2}	250	-	-		$V_{CE}=-2V, I_c=-1A$
	* 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	$V_{CE}=-5V, I_c=-50mA, f=50MHz$
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= 300 μs , Duty Cycle $\leq 2\%$

Characteristics Curve

