

RoHS Compliant Product

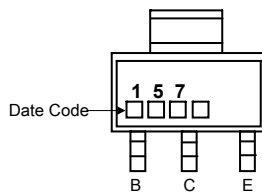
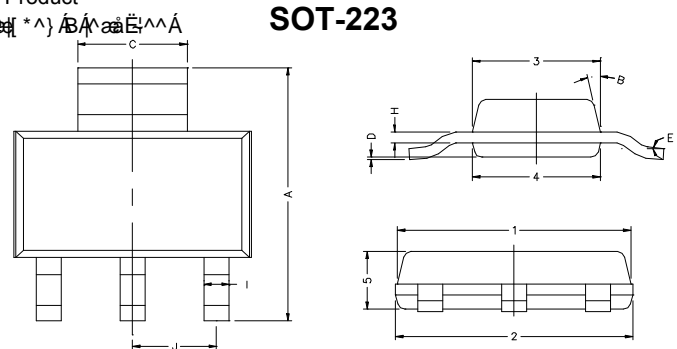
**SOT-223**

**Description**

The PZT157 is designed for general purpose switching and amplifier applications.

**Features**

- \* 3 Amps Continuous Current
- \* -60 Volt  $V_{CE0}$
- \* Low Saturation Voltages



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	-80	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current (DC)	-3	A
	Collector Current (Pulse)	-6	
$P_D$	Total Power Dissipation	2	W
$T_J, T_{stg}$	Junction and Storage Temperature	-55~+150	°C

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

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	$BV_{CBO}$	-80	-	-	V	$I_C=-100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$*BV_{CEO}$	-60	-	-	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	$V_{CB}=-60V, I_E=0$
Emitter-Base Cutoff Current	$I_{EBO}$	-	-	-100	nA	$V_{EB}=-4V, I_C=0$
Collector Saturation Voltage	$*V_{CE(sat)1}$	-	-150	-300	mV	$I_C=-1A, I_B=-100mA$
	$*V_{CE(sat)2}$	-	-450	-600		$I_C=-3A, I_B=-300mA$
Base Saturation Voltage	$*V_{BE(sat)}$	-	-0.9	-1.25	V	$I_C=-1A, I_B=-100mA$
Base-Emitter Voltage	$*V_{BE(on)}$	-	-0.8	-1.0	V	$I_C=-1A, V_{CE}=-2V$
DC Current Gain	$*h_{FE1}$	70	200	-		$V_{CE}=-2V, I_C=-50mA$
	$*h_{FE2}$	100	200	300		$V_{CE}=-2V, I_C=-500mA$
	$*h_{FE3}$	80	170	-		$V_{CE}=-2V, I_C=-1A$
	$*h_{FE4}$	40	150	-		$V_{CE}=-2V, I_C=-2A$
Gain-Bandwidth Product	fT	100	140	-	MHz	$V_{CE}=-5V, I_C=-100mA, f=100MHz$
Output Capacitance	$C_{ob}$	-	-	30	pF	$V_{CB}=-10V, f=1MHz$
On-Time	$T_{on}$	-	40	-	nS	$V_{CC}=-10V, I_C=-500mA, I_{B1}=I_{B2}=-50mA$
Off-Time	$T_{off}$	-	450	-		

\*Measured under pulse condition. Pulse width  $\leq 300\mu s$ , Duty Cycle  $\leq 2\%$   
Spice parameter data is available upon request for this device.

### Characteristics Curve

