

RoHS Compliant Product

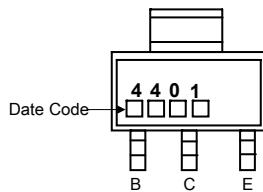
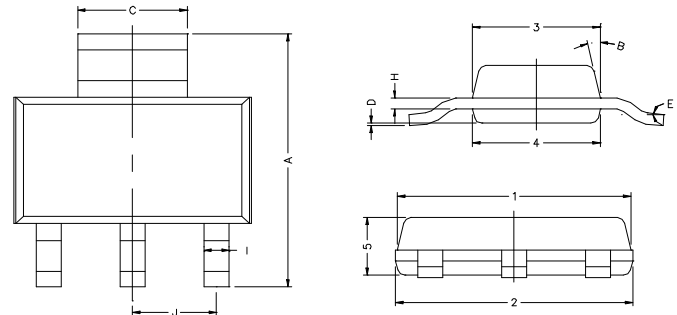
**SOT-223**

**Description**

The PZT4401 is designed for general purpose switching and amplifier applications.

**Features**

- \*High Power Dissipation: 1500mW at 25°C
- \*High DC Current Gain: 100~300 at 150mA
- \*Complementary to PZT4403



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

**ABSOLUTE MAXIMUM RATINGS Ta=25°C**

Symbol	Parameter	Value	Units
V <sub>CB0</sub>	Collector-Base Voltage	60	V
V <sub>CEO</sub>	Collector-Emitter Voltage	40	V
V <sub>EB0</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current (Continuous)	600	mA
P <sub>D</sub>	Total Power Dissipation	1.5	W
T <sub>J</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-55~+150	°C

**ELECTRICAL CHARACTERISTICS Tamb=25°C unless otherwise specified**

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	60	-	-	V	I <sub>C</sub> = 100μA
Collector-Emitter Breakdown Voltage	*BV <sub>CEO</sub>	40	-	-	V	I <sub>C</sub> = 1mA
Emitter-Base Breakdown Voltage	BV <sub>EB0</sub>	5	-	-	V	I <sub>E</sub> = 10μA
Collector-Base Cutoff Current	I <sub>CES</sub>	-	-	100	nA	V <sub>CE</sub> = 35V, V <sub>BE</sub> =0.4V
Collector Saturation Voltage	*V <sub>CE(sat)1</sub>	-	-	400	mV	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA
	*V <sub>CE(sat)2</sub>	-	-	750	mV	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA
Base Saturation Voltage	*V <sub>BE(sat)1</sub>	-	-	950	mV	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA
	*V <sub>BE(sat)2</sub>	750	-	1.2	V	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA
DC Current Gain	*h <sub>FE1</sub>	20	-	-		V <sub>CE</sub> = 1V, I <sub>C</sub> =0.1mA
	*h <sub>FE2</sub>	40	-	-		V <sub>CE</sub> = 1V, I <sub>C</sub> =1mA
	*h <sub>FE3</sub>	80	-	-		V <sub>CE</sub> = 1V, I <sub>C</sub> =10mA
	*h <sub>FE4</sub>	100	-	300		V <sub>CE</sub> = 1V, I <sub>C</sub> =150mA
	*h <sub>FE5</sub>	40	-	-		V <sub>CE</sub> = 2V, I <sub>C</sub> =500mA
Gain-Bandwidth Product	f <sub>T</sub>	250	-	-	MHz	V <sub>CE</sub> = 10V, I <sub>C</sub> = 20mA, f=100MHz
Output Capacitance	C <sub>ob</sub>	-	-	6.5	pF	V <sub>CB</sub> = 5V, f=1MHz

\*Pulse width ≤ 380μs, Duty Cycle ≤ 2%

**Classification of hFE4**

Rank	Q	R
Range	100~210	190~300

**Characteristics Curve**

