

RoHS Compliant Product

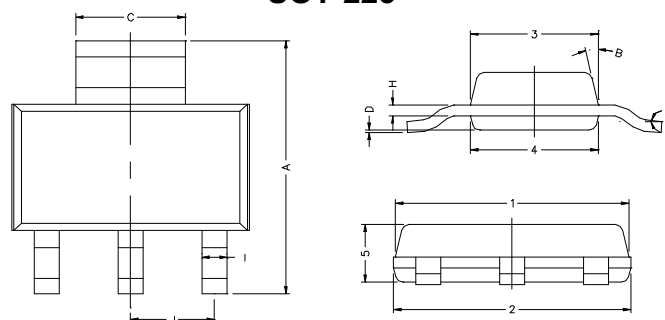
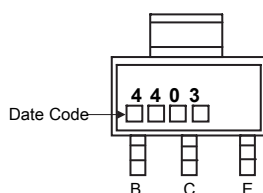
SOT-223

Description

The PZT4403 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 PZT4401



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 $T_a=25^\circ\text{C}$

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-40	V
V_{CE0}	Collector-Emitter Voltage	-40	V
V_{EB0}	Emitter-Base Voltage	-5	V
I_C	Collector Current (Continuous)	-600	mA
P_D	Total Power Dissipation	1.5	W
T_J, T_{stg}	Junction and Storage Temperature	-55~+150	°C

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

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CB0}	-40	-	-	V	$I_C=-100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$*BV_{CE0}$	-40	-	-	V	$I_C=-1\text{mA}$
Emitter-Base Breakdown Voltage	BV_{EB0}	-5	-	-	V	$I_E=-10\mu\text{A}$
Collector-Base Cutoff Current	I_{CES}	-	-	-100	nA	$V_{CE}=-35\text{V}, V_{BE}=-0.4\text{V}$
Collector Saturation Voltage	$*V_{CE(sat)1}$	-	-	-400	mV	$I_C=-150\text{mA}, I_B=-15\text{mA}$
	$*V_{CE(sat)2}$	-	-	-750	mV	$I_C=-500\text{mA}, I_B=-50\text{mA}$
Base Saturation Voltage	$*V_{BE(sat)1}$	-	-	-950	mV	$I_C=-150\text{mA}, I_B=-15\text{mA}$
	$*V_{BE(sat)2}$	-750	-	-1.3	V	$I_C=-500\text{mA}, I_B=-50\text{mA}$
DC Current Gain	$*h_{FE1}$	30	-	-		$V_{CE}=-1\text{V}, I_C=-0.1\text{mA}$
	$*h_{FE2}$	60	-	-		$V_{CE}=-1\text{V}, I_C=-1\text{mA}$
	$*h_{FE3}$	100	-	-		$V_{CE}=-1\text{V}, I_C=-10\text{mA}$
	$*h_{FE4}$	100	-	300		$V_{CE}=-1\text{V}, I_C=-150\text{mA}$
	$*h_{FE5}$	20	-	-		$V_{CE}=-2\text{V}, I_C=-500\text{mA}$
Gain-Bandwidth Product	f_T	200	-	-	MHz	$V_{CE}=-10\text{V}, I_C=-20\text{mA}, f=100\text{MHz}$
Output Capacitance	C_{ob}	-	-	8.5	pF	$V_{CB}=-10\text{V}, f=1\text{MHz}$

*Pulse width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

Classification of h_{FE4}

Rank	Q	R
Range	100~210	190~300

Characteristics Curve

