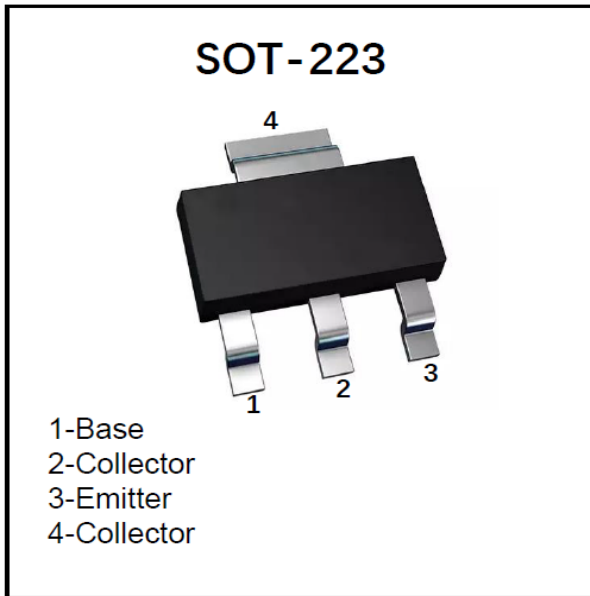


PNP Transistor



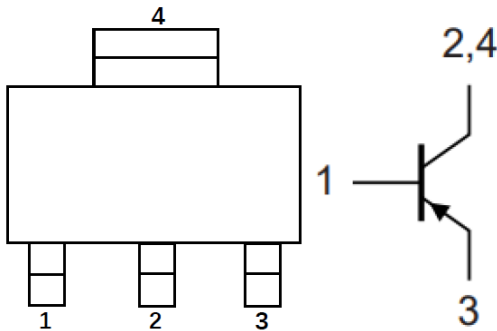
Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Sensitivity Level 1

Mechanical Data

- **Package:** SOT-223
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** ZT5401

Equivalent circuit



Maximum Ratings (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Collector-Emitter Voltage	V_{CEO}	V	$I_C = -1mA, I_E = 0$	-150
Collector-Base Voltage	V_{CBO}	V	$I_C = -100\mu A, I_B = 0$	-160
Emitter-Base Voltage	V_{EBO}	V	$I_E = -100\mu A, I_C = 0$	-5
Collector Current	I_C	A		-0.6
Power Dissipation(Note1)	P_D	W		0.5
Operation Junction Temperature	T_J	°C		-55 to +150
Storage Temperature	T_{stg}	°C		-55 to +150



PZT5401

■ Electrical Characteristics (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-Base Breakdown Voltage	V_{CBO}	V	$I_C=-100\mu A, I_E=0$	-160		
Collector-Emitter Breakdown Voltage	V_{CEO}	V	$I_C=-1mA, I_B=0$	-150		
Emitter-Base Breakdown Voltage	V_{EBO}	V	$I_E=-100\mu A, I_C=0$	-5		
Collector-Base Cut-Off Current	I_{CBO}	nA	$V_{CB}=-120V, I_E=0$			-50
Emitter-Base Cut-Off Current	I_{EBO}	nA	$V_{EB}=-3V, I_C=0$			-50
DC Current Gain	h_{FE}		$V_{CE}=-5V, I_C=-1mA$	50		
	h_{FE}		$V_{CE}=-5V, I_C=-10mA$	60		300
	h_{FE}		$V_{CE}=-5V, I_C=-50mA$	50		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V	$I_C=-10mA, I_B=-1mA$			-0.2
			$I_C=-50mA, I_B=-5mA$			-0.5
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	V	$I_C=-10mA, I_B=-1mA$			-1
			$I_C=-50mA, I_B=-5mA$			-1

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}^{(1)}$	°C/W	250
Thermal resistance, junction-to-case	$R_{\theta J-C}^{(1)}$	°C/W	50

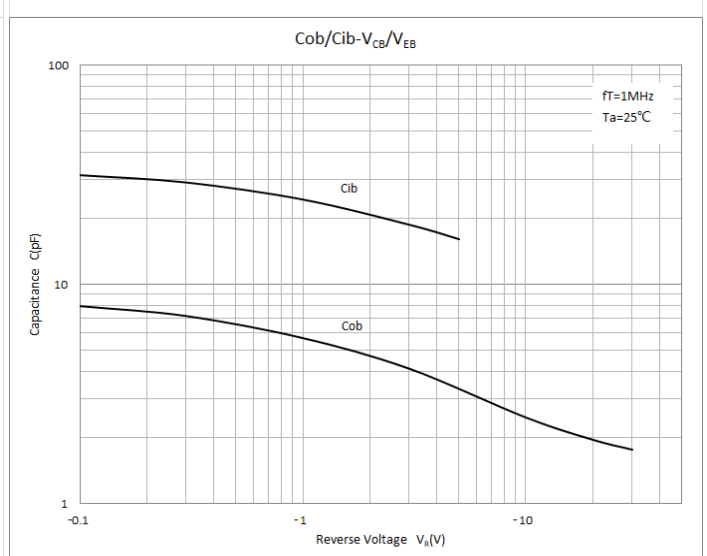
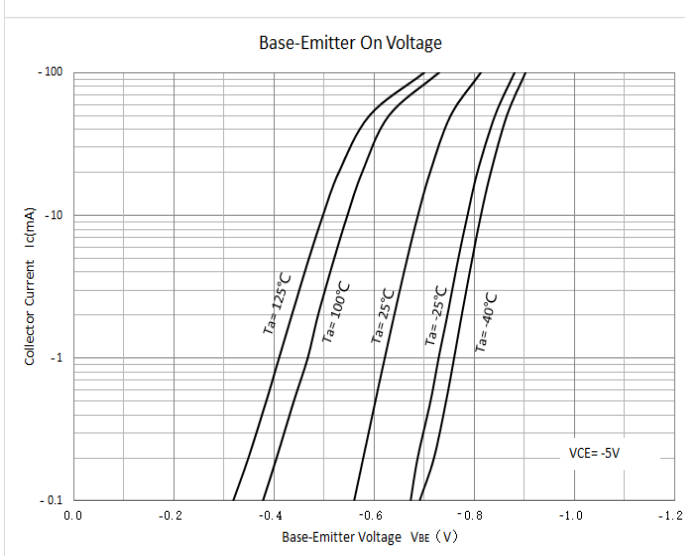
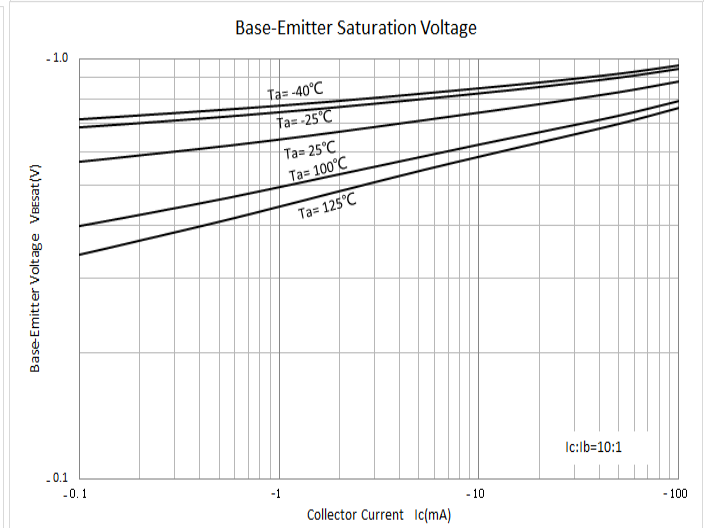
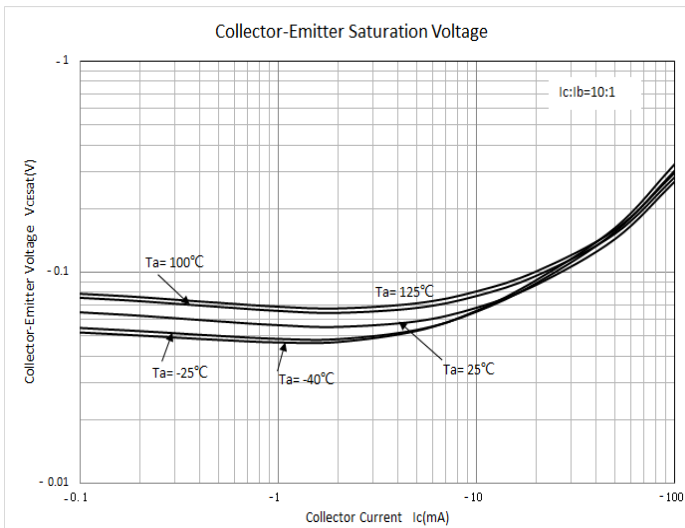
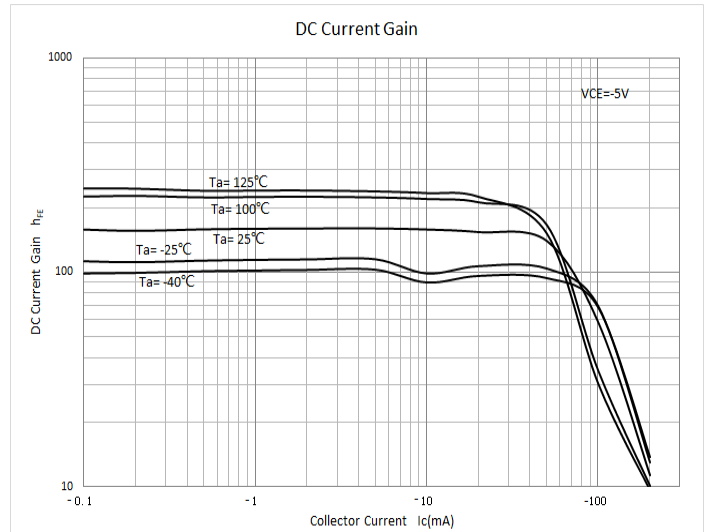
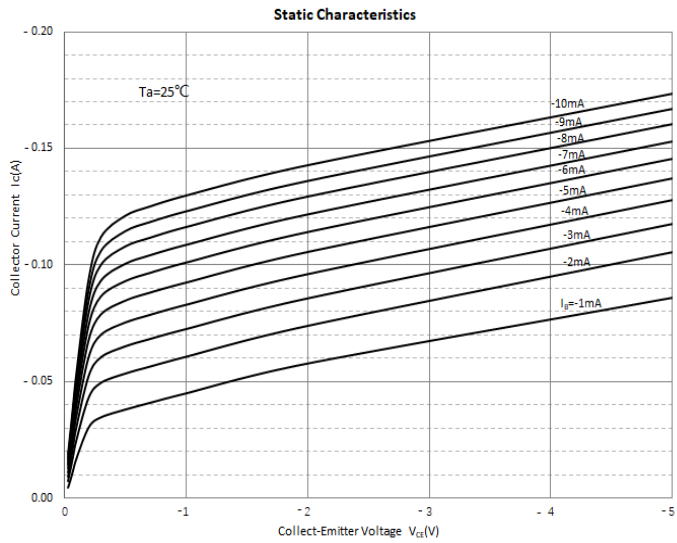
Note: (1)The device is installed and tested on 25.4 * 25.4 * 1.5mm P.C.B.

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
PZT5401	F2	Approximate 0.11	2500	5000	25000	13" reel



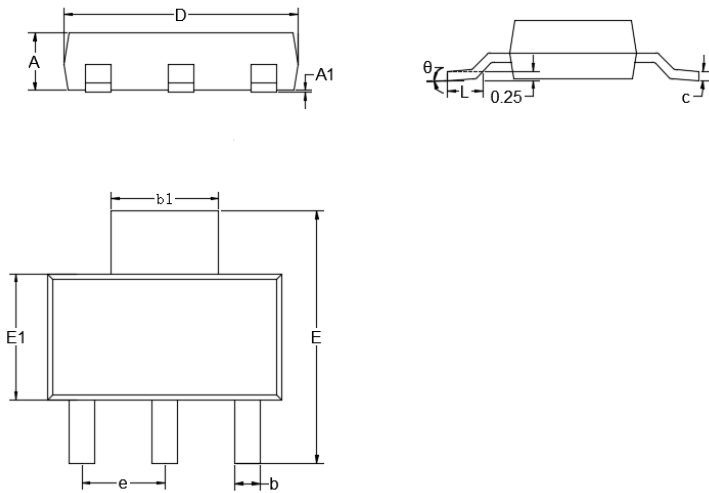
■ Characteristics (Typical)





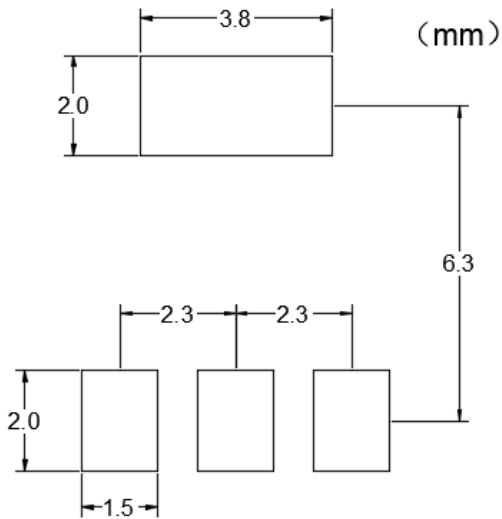
PZT5401

■SOT-223 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.0591	0.0670	1.5000	1.7000
A1	0.0008	0.0039	0.0200	0.1000
b	0.0259	0.0330	0.6600	0.8400
b1	0.1140	0.1220	2.9000	3.1000
c	0.0090	0.0138	0.2300	0.3500
D	0.2480	0.2640	6.3000	6.7000
E	0.2637	0.2874	6.7000	7.3000
E1	0.1290	0.1460	3.3000	3.7000
e	0.0866	0.0945	2.2000	2.4000
L	0.0295	0.0492	0.7500	1.2500
θ	0°	10°	0°	10°

■SOT-223 Suggested Pad Layout





PZT5401

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