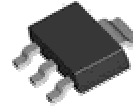




SOT-223 Plastic-Encapsulate Transistors

PZT4403 TRANSISTOR (PNP)

SOT-223



- 1. BASE
- 2. COLLECTOR
- 3. EMITTER

FEATURES

Power dissipation

$$P_{CM}: 1 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

$$I_{CM}: -0.6 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: -40 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB}=-40\text{V}, I_E=0$			-50	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}, I_C=0$			-50	nA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}, I_C=-0.1\text{mA}$	30			
	$h_{FE(2)}$	$V_{CE}=-1\text{V}, I_C=-1\text{mA}$	60			
	$h_{FE(3)}$	$V_{CE}=-1\text{V}, I_C=-10\text{mA}$	100			
	$h_{FE(4)}$	$V_{CE}=-1\text{V}, I_C=-150\text{mA}$	100		300	
	$h_{FE(5)}$	$V_{CE}=-2\text{V}, I_C=-500\text{mA}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-150\text{mA}, I_B=-15\text{mA}$			-0.4	V
	$V_{CE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-0.75	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-150\text{mA}, I_B=-15\text{mA}$			-0.95	V
	$V_{BE(sat)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-1.3	V
Transition frequency	f_T	$V_{CE}=-10\text{V}, I_C=-20\text{mA}, f=100\text{MHz}$	200			MHz
Collector capacitance	C_C	$V_{CB}=-5\text{V}, I_E=0, f=1\text{MHz}$			8.5	pF
Emitter capacitance	C_E	$V_{EB}=-0.5\text{V}, I_C=0, f=1\text{MHz}$			35	pF
Delay time	t_d	$V_{CC}=-29.5\text{V}, I_C=-150\text{mA}$ $V_{BB}=3.5\text{V}, I_{B1}=-I_{B2}=-15\text{mA}$			15	nS
Rise time	t_r				30	nS
Storage time	t_s				300	nS
Fall time	t_f				50	nS