



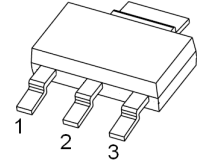
SOT-223 Plastic-Encapsulate Transistors

PZTA56 TRANSISTOR (PNP)

FEATURES

- Low Voltage and High Current
- General Purpose Amplifier Applications

SOT-223



1. BASE
2. COLLECTOR
3. EMITTER

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	$^\circ\text{C/W}$
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-0.1\text{mA}, I_E=0$	-80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=-1\text{mA}, I_B=0$	-80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-0.1\text{mA}, I_C=0$	-4			V
Collector cut-off current	I_{CBO}	$V_{CB}=-80\text{V}, I_E=0$			-100	nA
Collector cut-off current	I_{CEO}	$V_{CE}=-60\text{V}, I_B=0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-3\text{V}, I_C=0$			-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1\text{V}, I_C=-10\text{mA}$	100			
	$h_{FE(2)}$	$V_{CE}=-1\text{V}, I_C=-100\text{mA}$	100			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$			-0.25	V
Base-emitter voltage	V_{BE}	$V_{CE}=-1\text{V}, I_C=-100\text{mA}$			-1.2	V
Transition frequency	f_T	$V_{CE}=-1\text{V}, I_C=-100\text{mA}, f=100\text{MHz}$	50			MHz

*Pulse test: pulse width $\leq 300\mu\text{s}$, duty cycle $\leq 2.0\%$.