

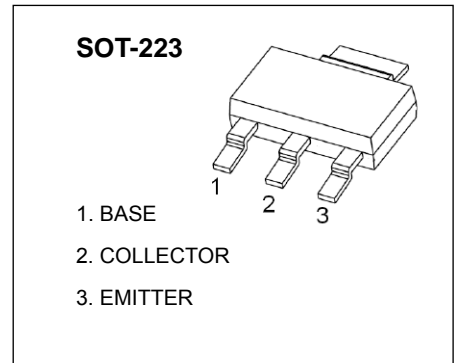


SOT-223 Plastic-Encapsulate Transistors

PZTA44 TRANSISTOR (NPN)

FEATURES

- Low current : 300mA(max)
- High voltage: $V_{CE0}=400V$



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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	300	mA
P_C	Collector Power Dissipation	1000	mW
T_j	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature	-65~150	$^{\circ}C$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	500			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=400V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=10V, I_C=1mA$	40			
	$h_{FE(2)}$	$V_{CE}=10V, I_C=10mA$	50		200	
	$h_{FE(3)}$	$V_{CE}=10V, I_C=50mA$	45			
	$h_{FE(4)}$	$V_{CE}=10V, I_C=100mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1mA, I_B=0.1mA$			0.4	V
	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.5	V
	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.75	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			0.85	V
Transition frequency	f_T	$V_{CE}=10V, I_C=10mA, f=100MHz$	20			MHz
Collector capacitance	C_C	$V_{CB}=20V, I_E=0, f=1MHz$			7	pF
Emitter capacitance	C_e	$V_{EB}=0.5V, I_C=0, f=1MHz$			180	pF