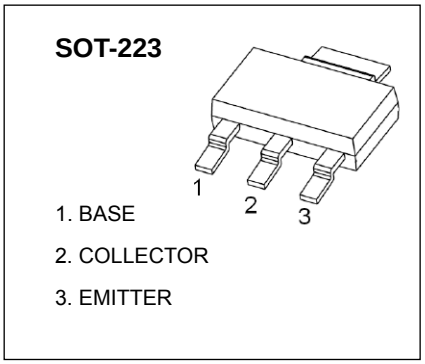
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-223 Plastic-Encapsulate Transistors

PZTA14 TRANSISTOR (NPN)



FEATURES

- High current (max. 500 mA)
- Low voltage (max. 30 V).
- Pre-amplifiers requiring high input impedance.

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current -Continuous	500	mA
P_C	Collector Power Dissipation	1	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-65~150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=100μA,I_E=0	30			V
Collector-emitter breakdown voltage	$V_{CE(SUS)}$	Ic=100uA,I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	10			V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			0.1	μA
base cut-off current	I_{CEO}	V_{EB}=10V,I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=5.0V,I_C=10mA	10000			
	$h_{FE(2)}$	V_{CE}=5.0V,I_C=100mA	20000			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA,I_B=0.1mA			1.5	V
Base-emitter voltage	V_{BE}	V_{CE}=5V,I_c=100mA			2	V
Transition frequency	f_T	V_{CE}=5V,I_C=10mA,f=100MHz	125			MHz