

FEATURES

Low current : 300mA(max)

High voltage: $V_{CEO}=400V$

PZTA44 (NPN)



MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	500	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	300	mA
Collector Power Dissipation	I_C	1	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=100\mu A, I_E=0$	500			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=1mA, I_B=0$	400			V
Emitter-base breakdown voltage	V_{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

PZTA44 Typical Characteristics

