PZTA44 TRA NSISTOR (NPN)

SOT-223

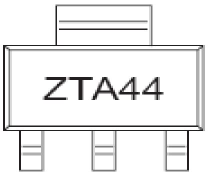
FEATURES

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

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

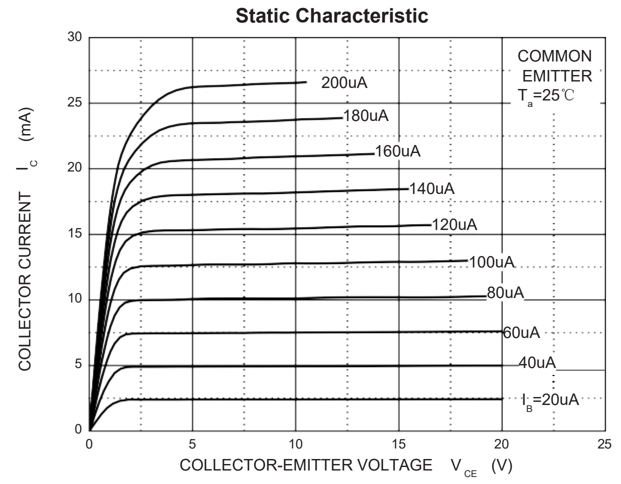
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	400 V	
V_{CEO}	Collector-Emitter Voltage	400 V	
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	200	mA
I_{CM}	Collector Current -Pulsed	300	mA
P_C	Collector Power Dissipation	1	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~150	℃

MARKING:

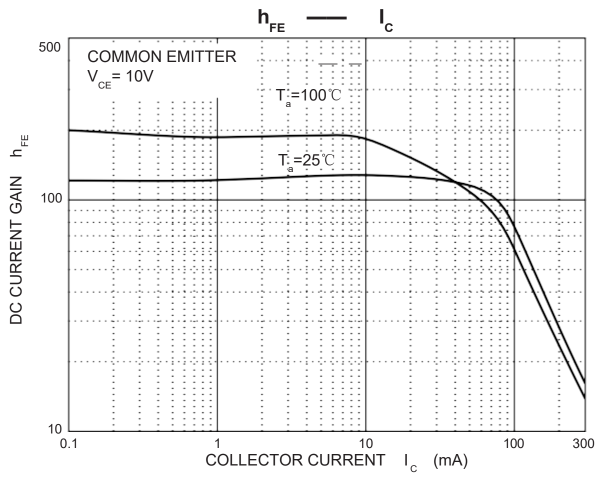


ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

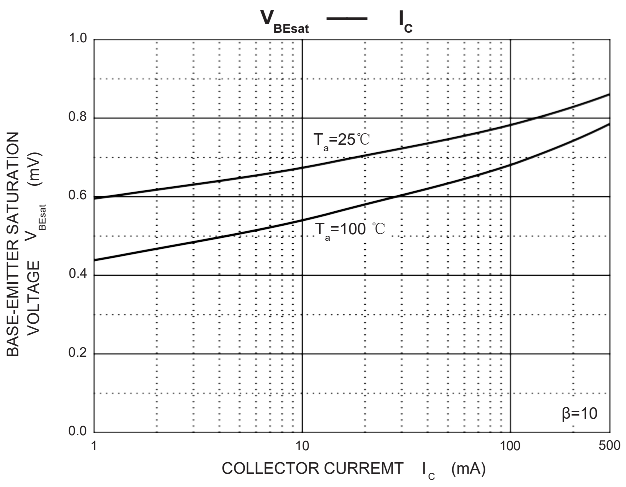
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=400V,I_E=0			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			0.75	V
Transition frequency	f_T	V_{CE}=10V,I_C=10mA,f=100MHz	20			MHz
Collector ca pacitance	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			130	pF



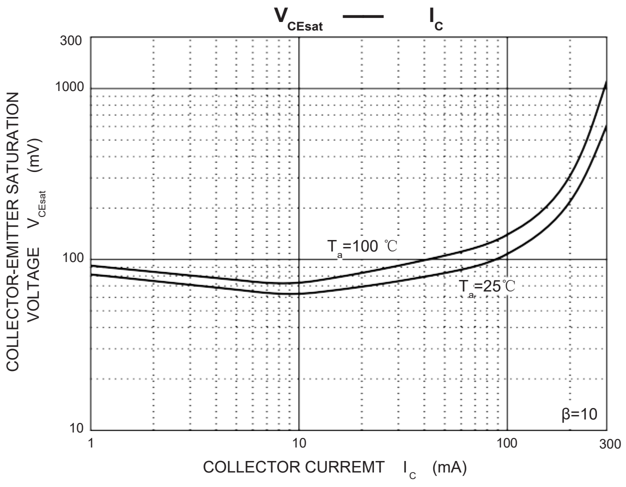
Static Characteristic



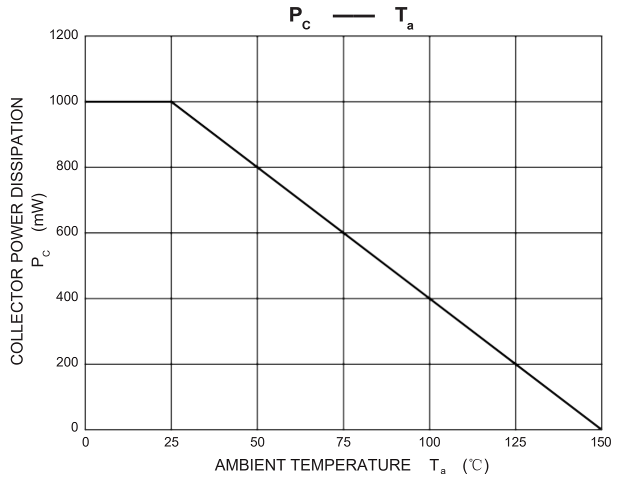
h_{FE} — I_C



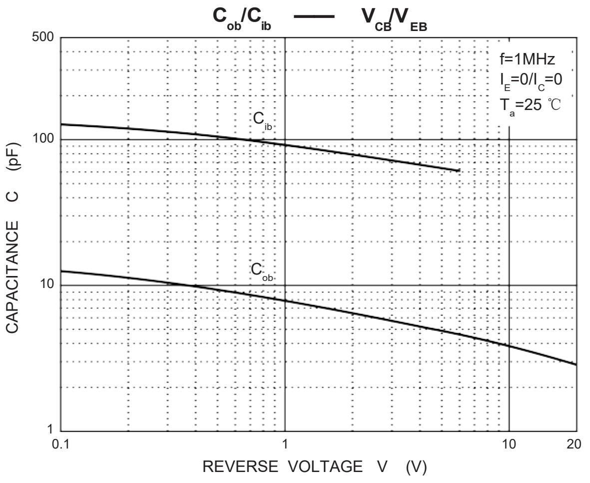
V_{BEsat} — I_C



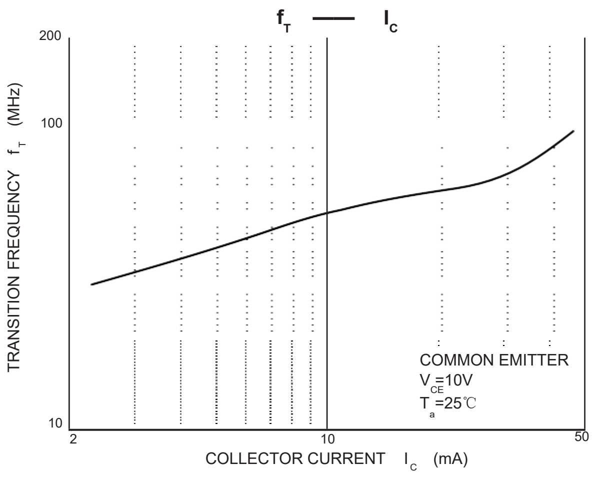
V_{CEsat} — I_C



P_C — T_a



C_{ob}/C_{ib} — V_{CB}/V_{EB}



f_T — I_C