2SC4544 TRANSISTOR (NPN)

1.BASE
2.COLLECTOR
3.EMITTER

TO-220C

FEATURES

- High voltage: $V_{(BR)\,CEO}$ = 300 V
- Small collector output capacitance: C_{ob} = 3.0 pF (typ.)
- Collector metal (fin) is fully covered with mold resin.

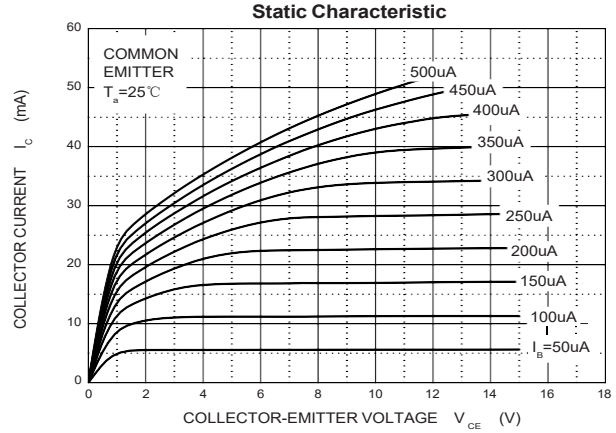
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current -Continuous	0.1	A
P_C	Collector Power Dissipation	2	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

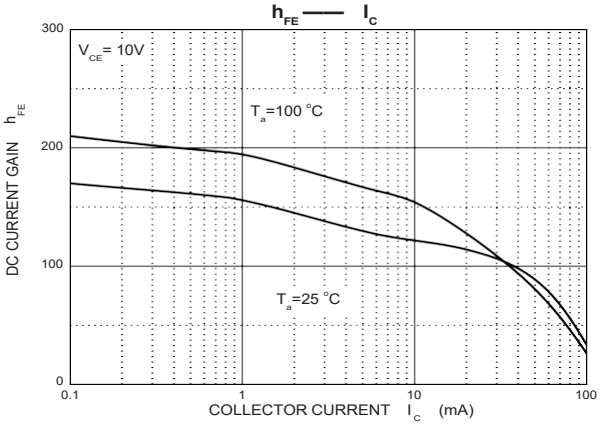
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	300			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	300			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	7			V
Collector cut-off current	I_{CBO}	V_{CB}=240V,I_E=0			1.0	μA
Emitter cut-off current	I_{EBO}	V_{EB}=7V,I_C=0			1.0	μA
DC current gain	$h_{FE(1)}$	V_{CE}=10V,I_C=4mA	20			
	$h_{FE(2)}$	V_{CE}=10V,I_C=20mA	30		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA			1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=10mA, I_B=1mA			1.0	V
Transition frequency	f_T	V_{CE}=10V,I_C=20mA	50	70		MHz
Collector output capacitance	C_{ob}	V_{CB}=20V,I_E=0,f=1MHz		3.0		pF

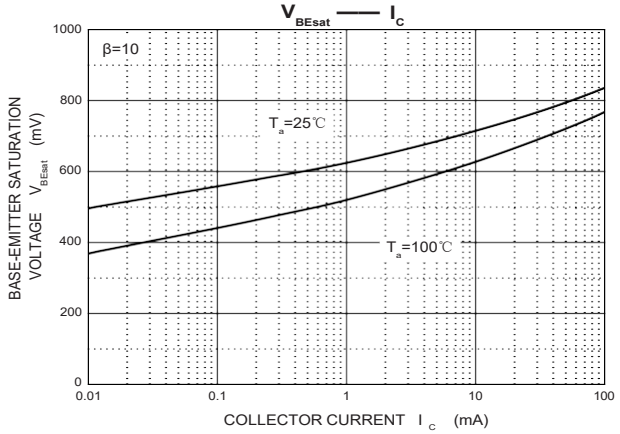
Static Characteristic



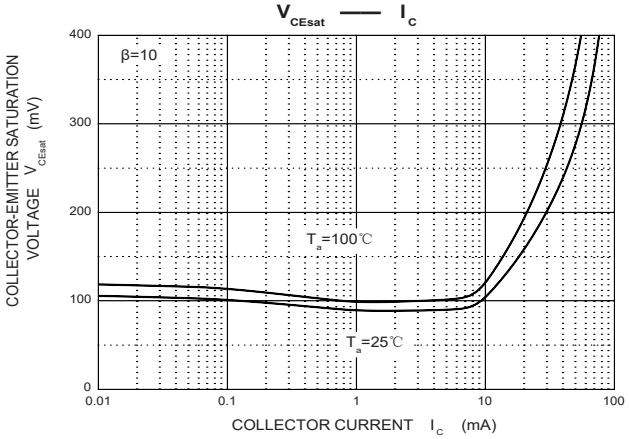
h_{FE} —— I_C



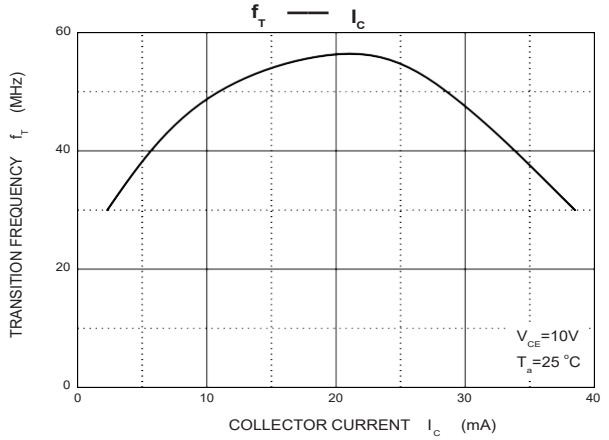
V_{BEsat} —— I_C



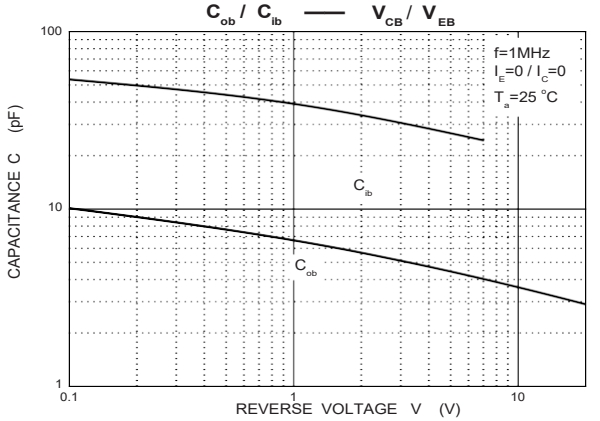
V_{CEsat} —— I_C



f_T —— I_C



C_{ob} / C_{ib} —— V_{CB} / V_{EB}



P_c —— T_a