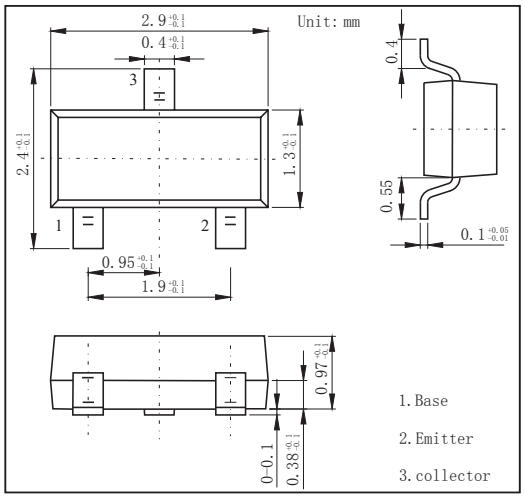
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Low Collector-to-Emitter Saturation Voltage
- Fast Switching Speed
- NPN Transistors

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

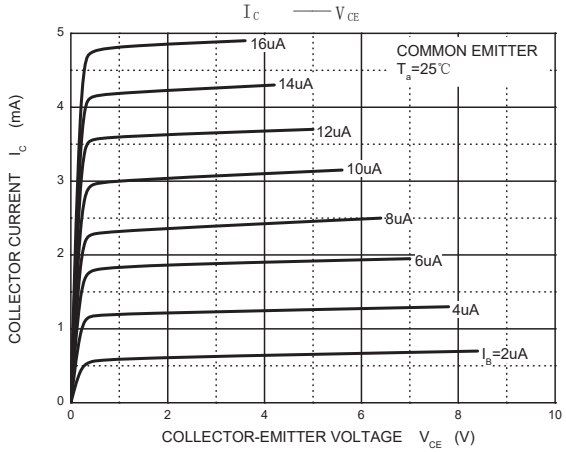
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current to Continuous	I_C	150	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	125	℃
Storage Temperature	T_{stg}	-55~+150	℃

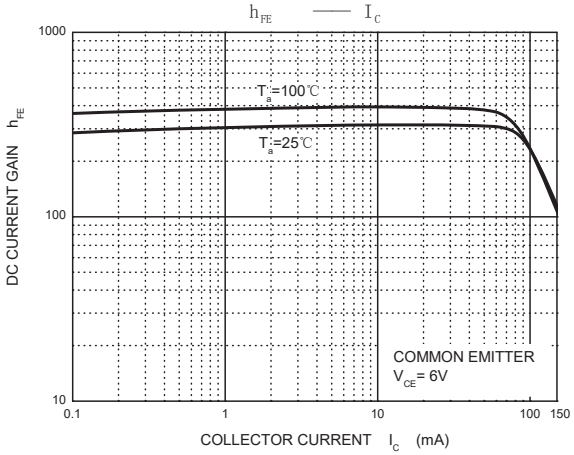
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	VCBO	Ic= 100 A, IE=0	60			V
Collector to emitter breakdown voltage	VCEO	Ic= 0 . 1 m A , I B=0	50			V
Collector cut to off current	ICBO	VCB=60V, IE=0			0.1	A
Collector cut to off current	ICEO	VCE=40V, IB=0			1	A
Emitter cut to off current	IEBO	VEB= 5 V , I C=0			0.1	A
DC current gain	hFE	VCE= 6 V , I C= 2mA	130		400	
Collector to emitter saturation voltage	VCE(sat)	IC=100 mA, IB= 10mA			0.25	V
Base to emitter saturation voltage	VBE(sat)	IC=100 mA, IB= 10mA			1	V
Transition frequency	fT	VCE=10V, IC= 1mA,f=30MHz	80			MHz

RATINGS AND CHARACTERISTIC CURVES

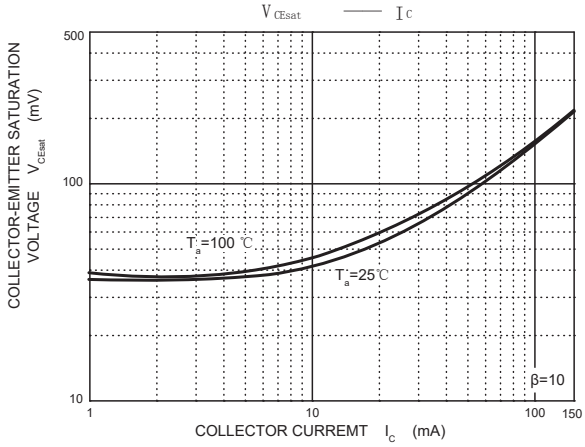
I_C —— V_{CE}



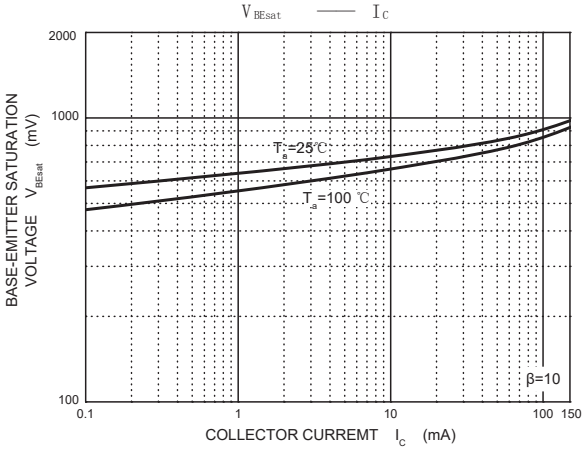
h_{FE} —— I_C



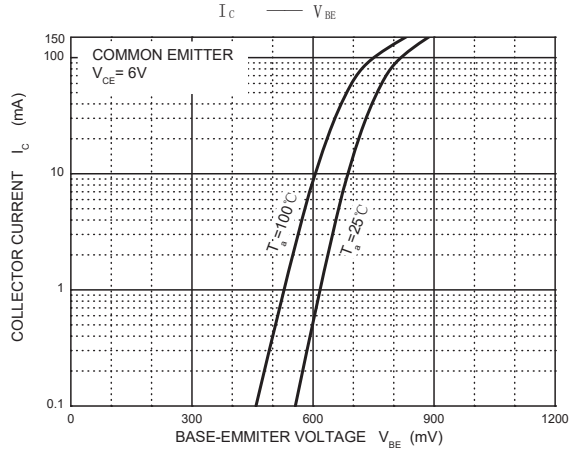
V_{CEsat} —— I_C



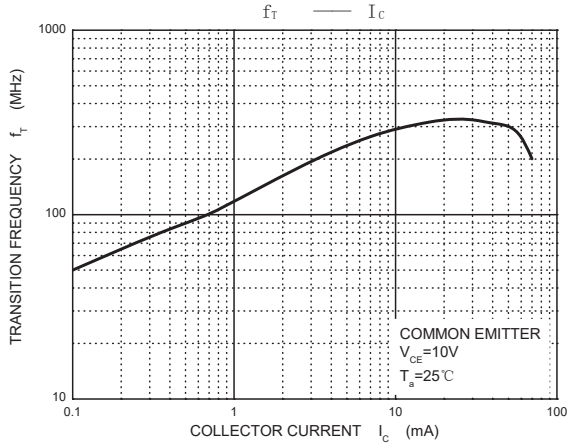
V_{BEsat} —— I_C



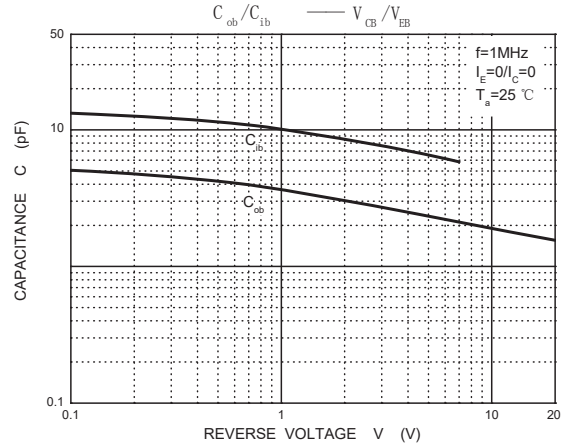
I_C —— V_{BE}



f_T —— I_C



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



P_C —— T_a