2SC2383

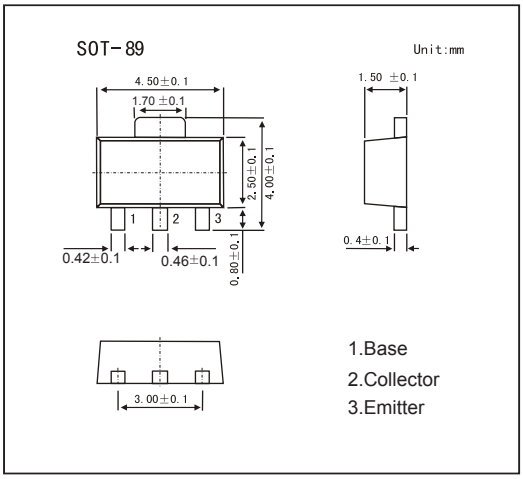
SOT-89 Plastic-Encapsulate Transistors

FEATURES

- High voltage: VCEO=160V
- Large continuous collector current
- NPN Transistors

MECHANICAL DATA

- Case style:SOT-89 molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

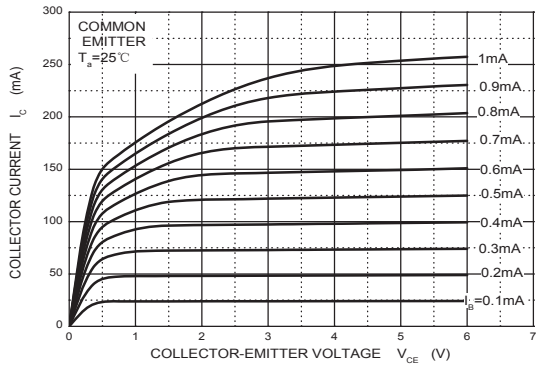
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	160	V
Collector - Emitter Voltage	V_{CEO}	160	
Emitter - Base Voltage	V_{EBO}	6	
Collector Current - Continuous	I_C	1	A
Collector Power Dissipation	P_C	0.5	W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

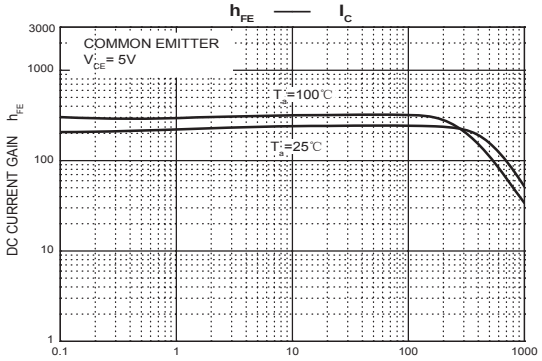
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 100 μA， I_E= 0	160			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 10 mA， I_B= 0	160			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μ A， I_C= 0	6			
Collector-base cut-off current	I_{CBO}	V_{CB}= 150 V , I_E= 0			1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= 6V , I_C=0			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500 mA, I_B=50mA			1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C= 500 mA, I_B= 50mA			1.2	
Base - emitter voltage	V_{BE}	V_{CE}= 5V, I_C= 5mA	0.45		0.75	
DC current gain	h_{FE}	V_{CE}= 6V, I_C= 200mA	100		320	
Collector output capacitance	C_{ob}	V_{CB}= 10V, I_E= 0,f=1MHz			20	pF
Transition frequency	f_T	V_{CE}= 5V, I_C= 200mA	20			MHz

RATINGS AND CHARACTERISTIC CURVES

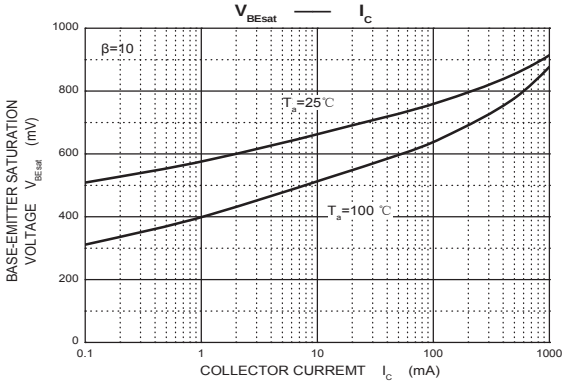
Static Characteristic

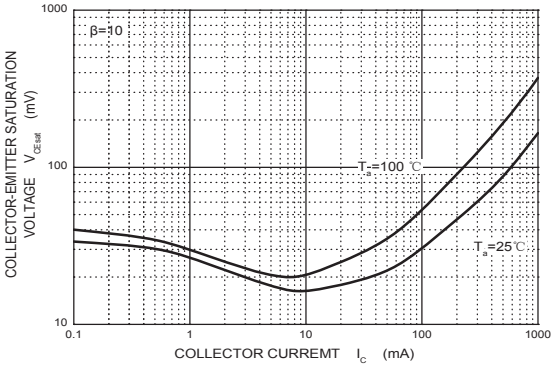


h_{FE} —— I_C

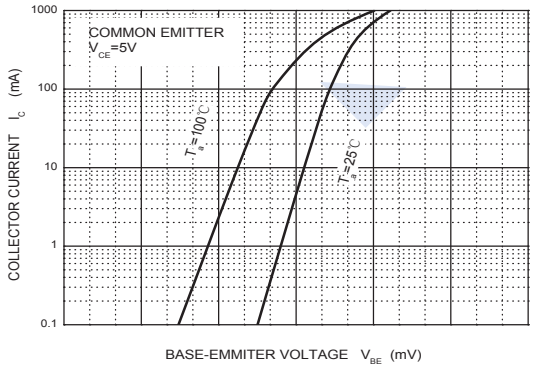


V_{BEsat} —— I_C

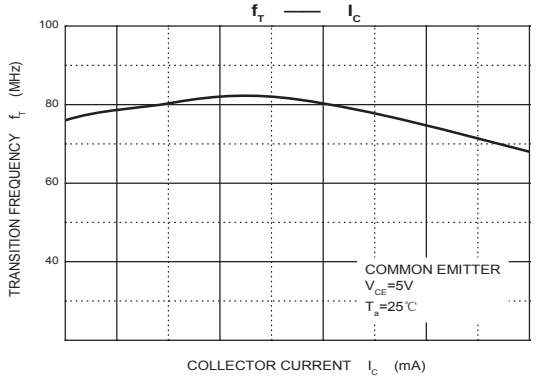




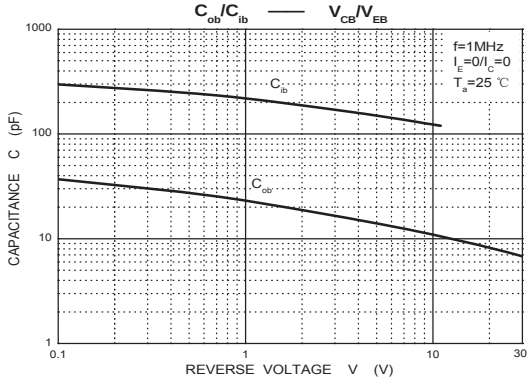
I_C —— V_{BE}



f_T —— I_C



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



P_C —— T_a