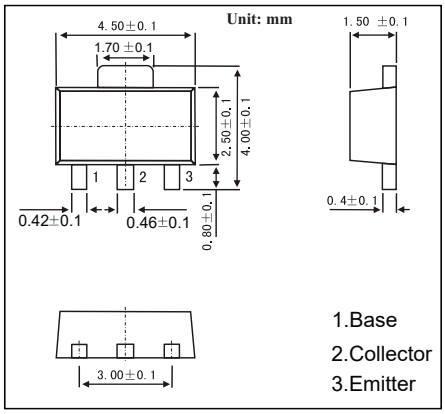
SOT-89 Plastic-Encapsulate Transistors

FEATURES

- Low Saturation Voltage
- Excellent hFE Characteristics
- Transistors NPN

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

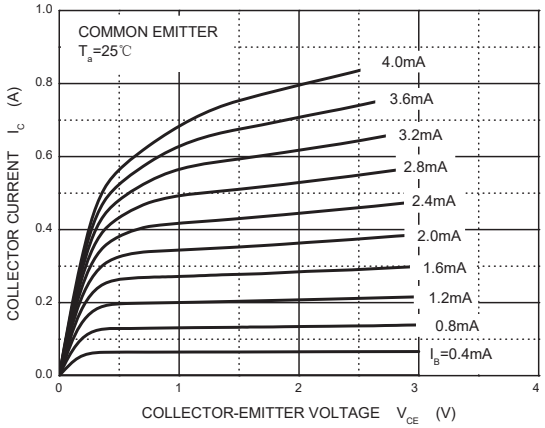
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	VCBO	60	V
Collector - Emitter Voltage	VCEO	50	
Emitter - Base Voltage	VEBO	6	
Collector Current - Continuous	IC	2	A
Collector Power Dissipation	PC	500	mW
Thermal Resistance From Junction To Ambient	RθJA	250	℃/W
Junction Temperature	TJ	150	℃
Storage Temperature Range	Tstg	-55 to +50	

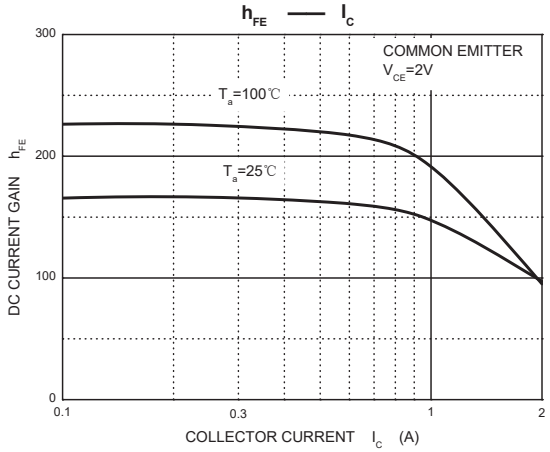
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	VCBO	Ic= 50 μA， IE= 0	60			V
Collector- emitter breakdown voltage	VCEO	Ic= 1 mA， IB= 0	50			
Emitter - base breakdown voltage	VEBO	IE= 50μA， IC= 0	6			
Collector-base cut-off current	ICBO	VCB= 60V , IE= 0			0.1	uA
Emitter cut-off current	IEBO	VEB= 5V , IC=0			0.1	
Collector-emitter saturation voltage	VCE(sat)	IC=1A, IB=50mA			0.35	V
Base - emitter saturation voltage	VBE(sat)	IC=1A, IB=50mA			1.2	
DC current gain	hFE	VCE= 2V, IC= 500mA	82		390	
Collector output capacitance	Cob	VCB= 10V, IE= 0,f=1MHz		25		pF
Transition frequency	fT	VCE= 2V, IC= 500mA,f=100MHz		210		MHz

RATINGS AND CHARACTERISTIC CURVES

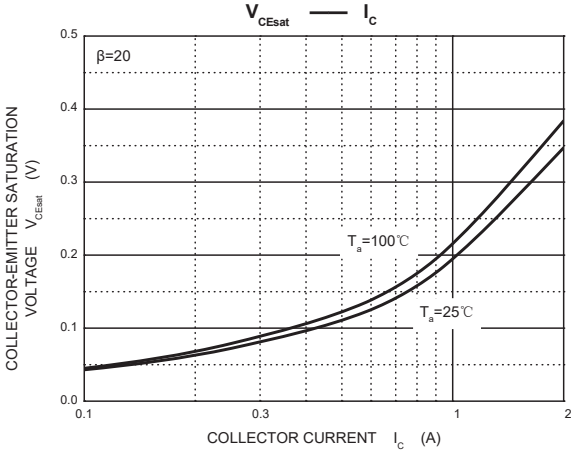
Static Characteristic



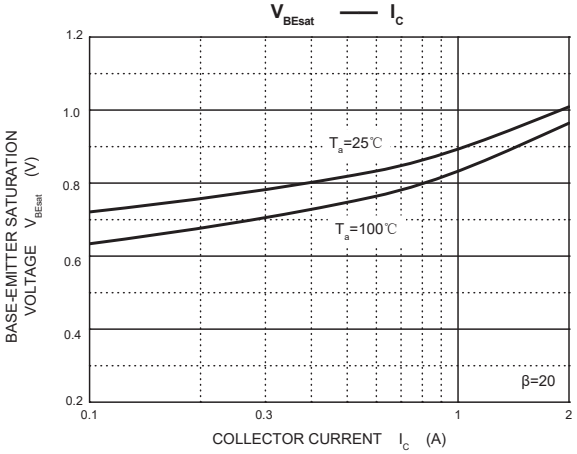
h_{FE} — I_C



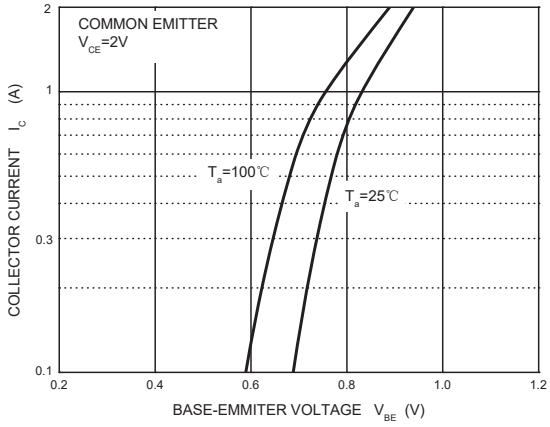
V_{CEsat} — I_C



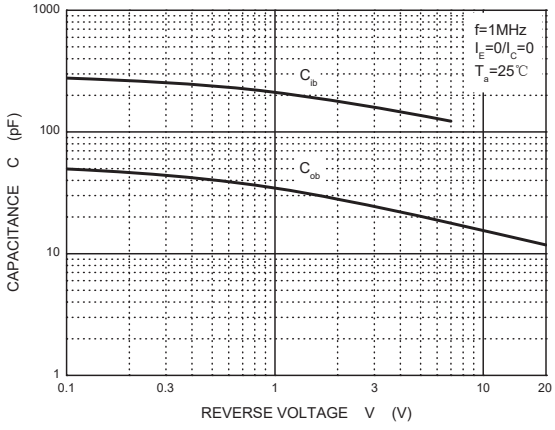
V_{BEsat} — I_C



I_C — V_{BE}



C_{ob}/ C_{ib} — V_{CB}/ V_{EB}



P_C — T_a