

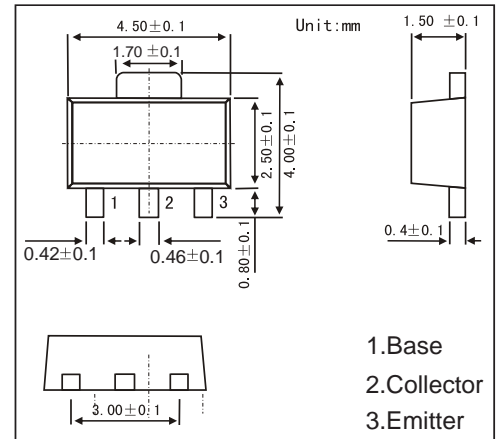
## SOT-89 Plastic-Encapsulate Transistors

### FEATURES

- Large collector power dissipation PC
- PNP Transistors

### MECHANICAL DATA

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



### MAXIMUM RATINGS AND CHARACTERISTICS

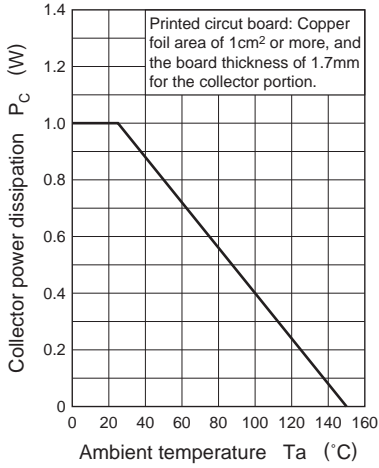
@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-30	V
Collector - Emitter Voltage	V <sub>CEO</sub>	-25	
Emitter - Base Voltage	V <sub>EBO</sub>	-5	
Collector Current - Continuous	I <sub>C</sub>	-1	A
Collector Current - Pulse	I <sub>CP</sub>	-1.5	
Collector Power Dissipation	P <sub>C</sub>	1	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

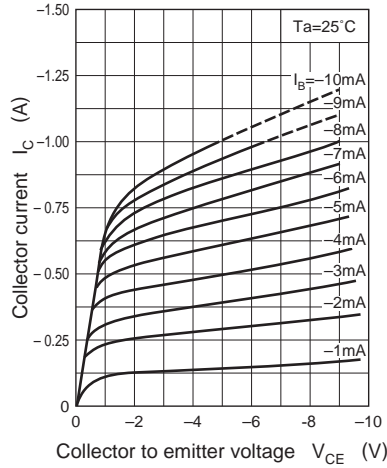
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>C</sub> = -100 μA, I <sub>E</sub> =0	-30			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -2 mA, I <sub>B</sub> =0	-25			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100 μA, I <sub>C</sub> =0	-5			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -20 V, I <sub>E</sub> =0			-100	nA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -4V, I <sub>C</sub> =0			-100	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-50mA		-0.2	-0.4	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-50mA		-0.85	-1.2	
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -500mA	85		340	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =- 5V, I <sub>C</sub> = -1A	50			
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f=1MHz		20	30	pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -50mA, f=200MHz		200		MHz

RATINGS AND CHARACTERISTIC CURVES

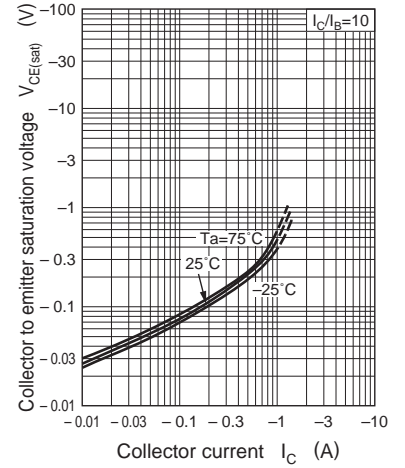
$P_C - T_a$



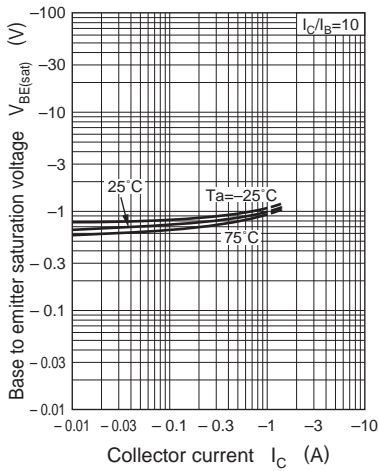
$I_C - V_{CE}$



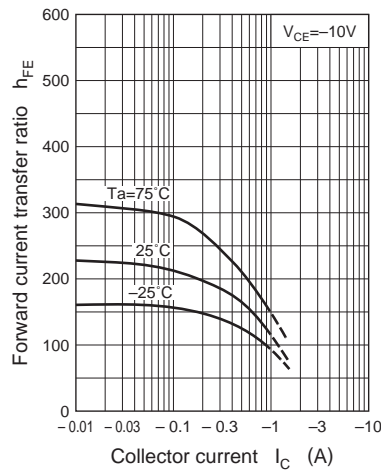
$V_{CE(sat)} - I_C$



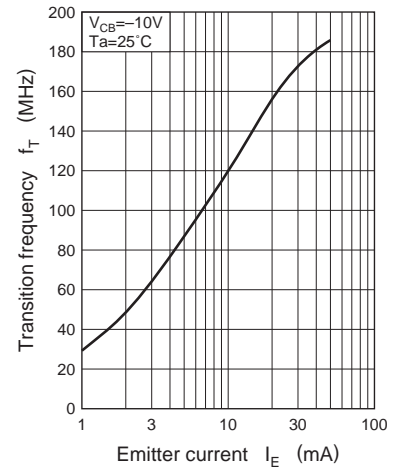
$V_{BE(sat)} - I_C$



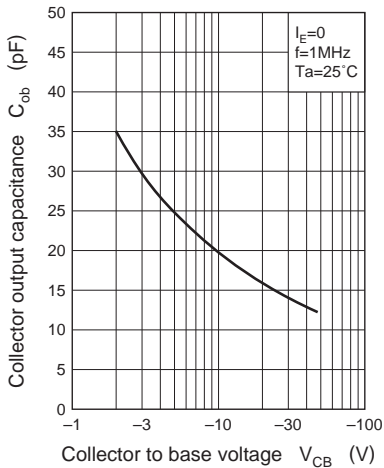
$h_{FE} - I_C$



$f_T - I_E$



$C_{ob} - V_{CB}$



Area of safe operation (ASO)

