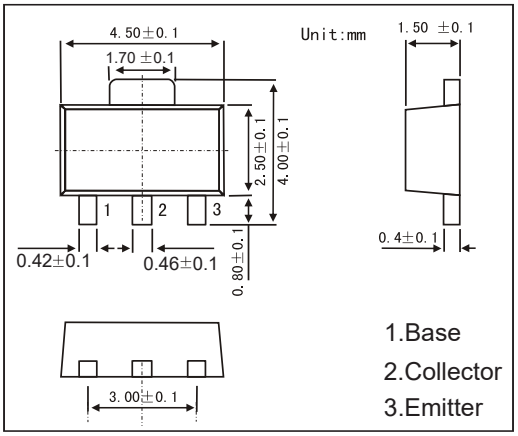
SOT-89 Plastic-Encapsulate Transistors

FEATURES

- Suitable For Output Stage of 3 Watts
- Amplifier Small Flat Package
- PC = 1 to 2W (mounted on ceramic substrate)
- Complementary to 2SC2883
- PNP Transistors

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

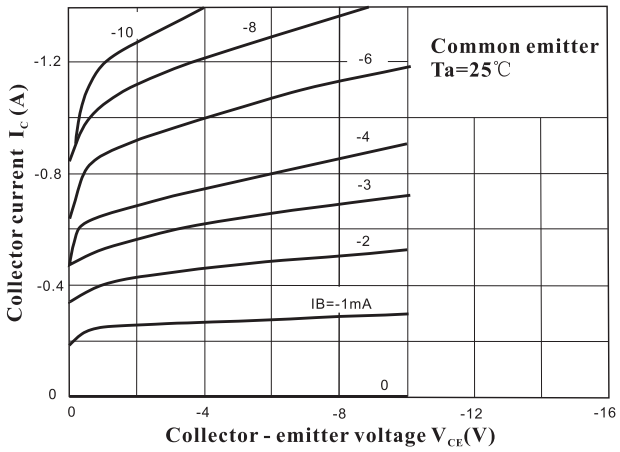
Parameter	Symbol	Rating	Unit
Collector-Base Voltage	VCBO	-30	V
Collector-Emitter Voltage	VCEO	-30	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current	IC	-1.5	A
Base Current	IB	-0.3	A
Collector Power Dissipation	PC PC *	500 1000	mW
Jumction temperature	Tj	150	℃
Storage temperature Range	Tstg	-55to+150	℃

* Mounted on ceramic substrate (250 mm^2 x 0.8 t)

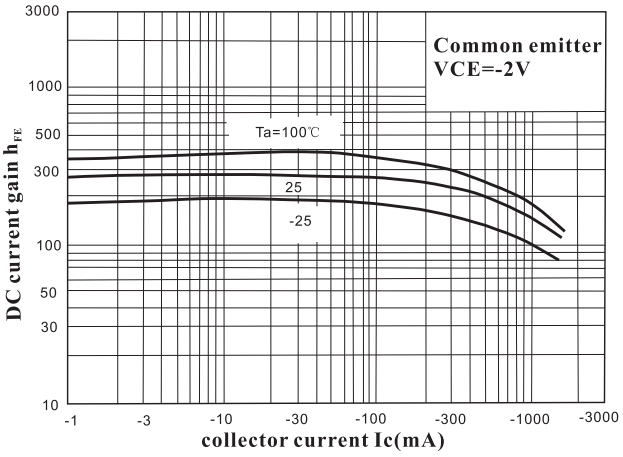
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -1 mA， I_E=0	-30			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -10 mA， I_B=0	-30			
Emitter - base breakdown voltage	V_{EBO}	I_E= -1mA， I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -30 V , I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V , I_C=0			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-1.5A, I_B=- 30mA			-2.0	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-1.5A, I_B=- 30mA			-1.2	
Base - emitter voltage	V_{BE}	V_{CE}= -2V, I_C=-500 mA			-1	
DC current gain	h_{FE}	V_{CE}= -2V, I_C= -500mA	100		320	
Output capacitance	C_{ob}	V_{CE}= -10V,I_E=0,f=1MHz			50	pF
Transition frequency	f_T	V_{CE}= -2V, I_E= -500mA		120		MHz

RATINGS AND CHARACTERISTIC CURVES

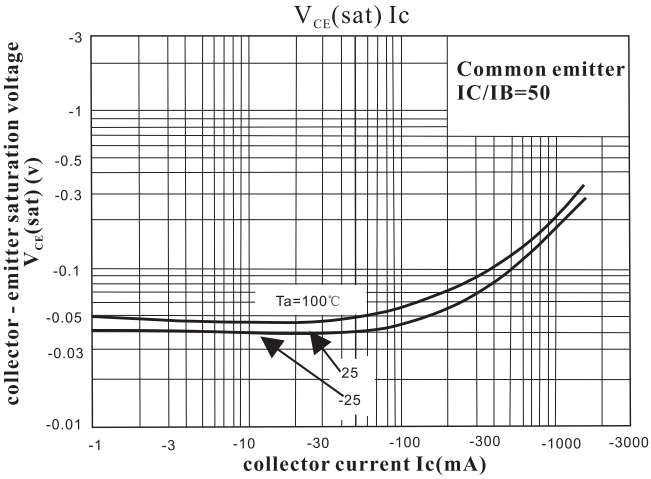
I_C - V_{CE}



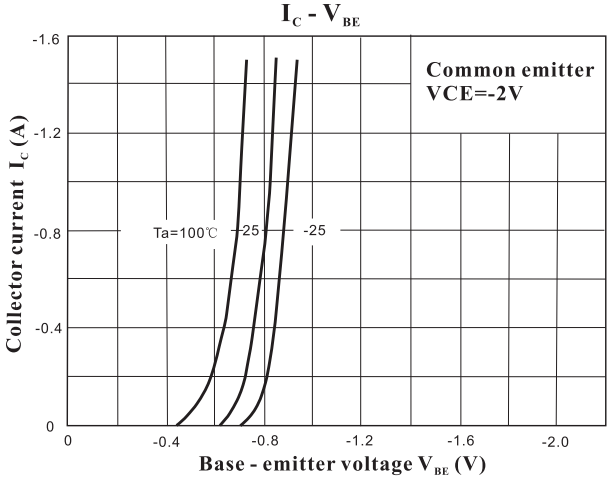
h_{FE} -I_C



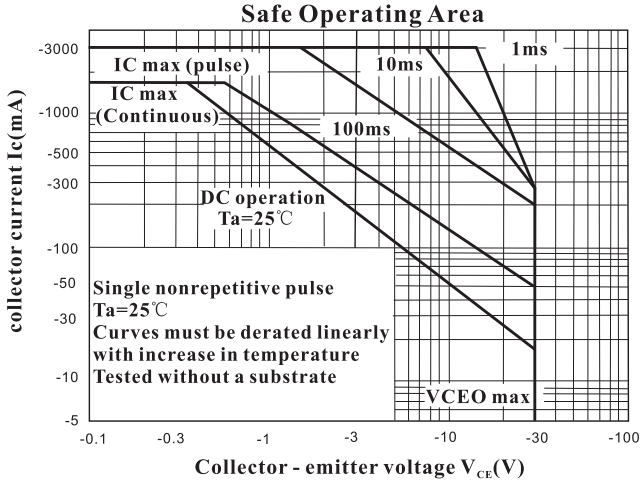
V_{CE}(sat) Ic



I_C - V_{BE}



Safe Operating Area



P_C - Ta