

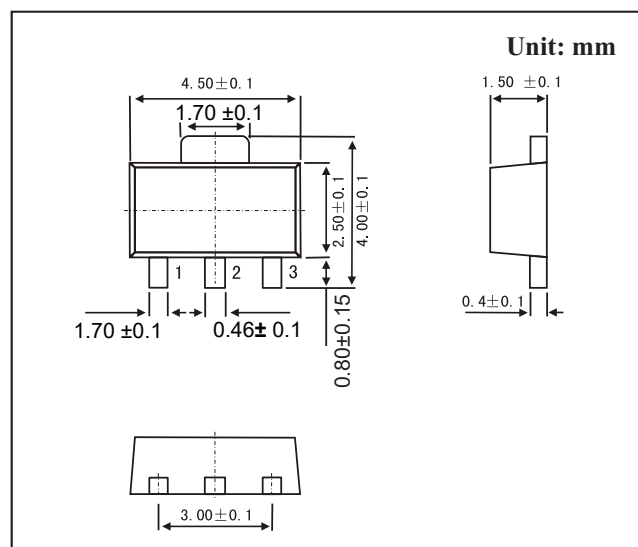
SOT-89 Plastic-Encapsulate Transistors

FEATURES

- Low Saturation Voltage: $V_{CE(sat)} = -0.5V$ (max) ($I_C = -1A$)
- High Speed Switching Time: $t_{stg} = 1.0\mu s$ (typ.)
- Small Flat Package
- $P_C = 1$ to $2W$ (mounted on ceramic substrate)
- PNP Transistors

MECHANICAL DATA

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



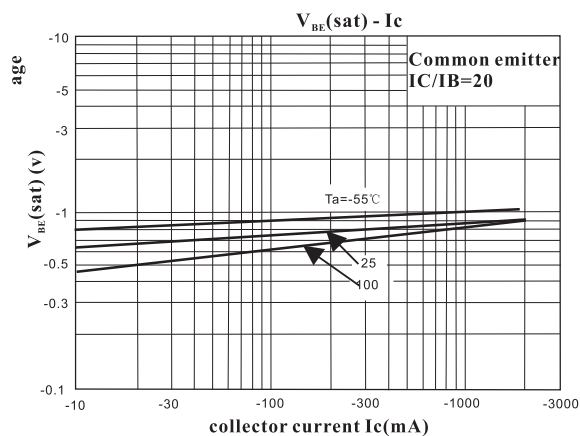
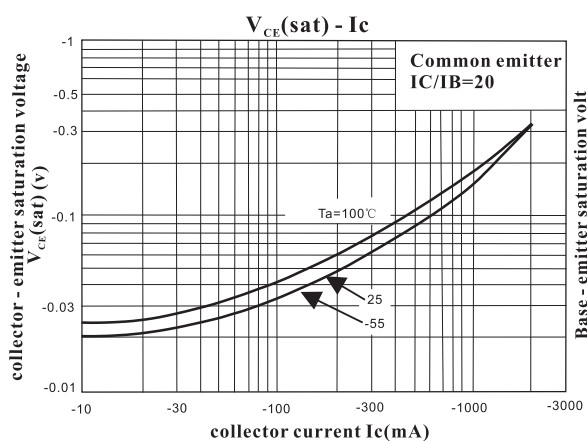
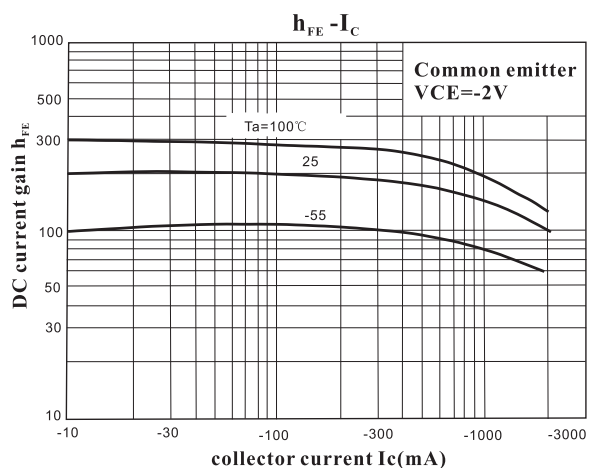
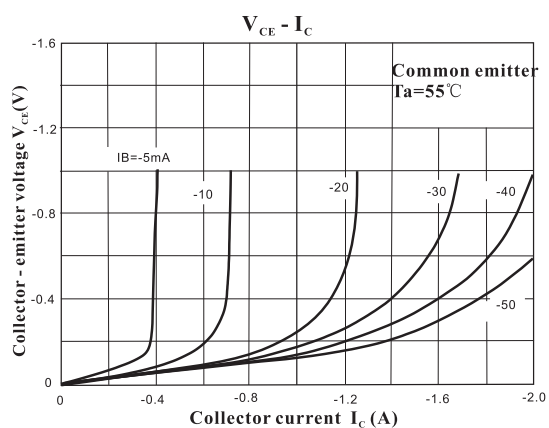
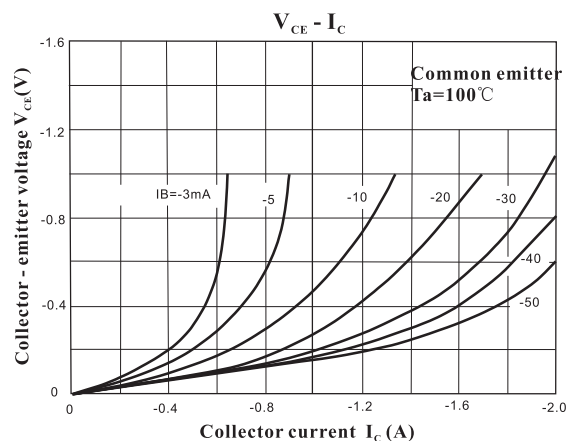
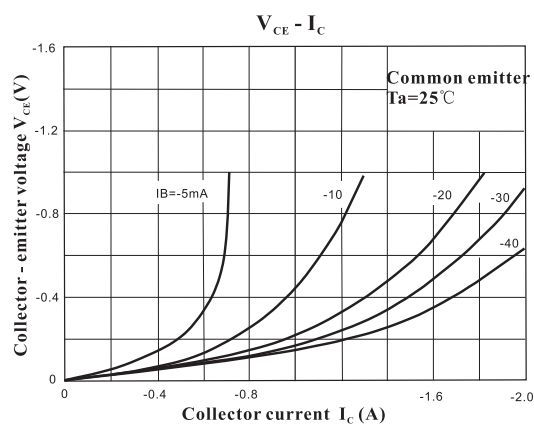
MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-50	V
Collector - Emitter Voltage	V_{CEO}	-50	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-2	A
Base Current - Continuous	I_B	-0.4	
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	150	°C
Storage Temperature range	T_{stg}	-55 to 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100 \mu A, I_E = 0$	-50			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -10 mA, I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -50 V, I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 V, I_C = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1 A, I_B = -50 mA$			-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1 A, I_B = -50 mA$			-1.2	
DC current gain	$h_{FE(1)}$	$V_{CE} = -2 V, I_C = -0.5 A$	70		240	
	$h_{FE(2)}$	$V_{CE} = -2 V, I_C = -2 A$	20			
Turn-on time	t_{on}	See Test Circuit.		0.1		us
Storage time	t_{stg}			1		
Fall time	t_f			0.1		
Collector output capacitance	C_{ob}	$V_{CB} = -10 V, I_E = 0, f = 1 MHz$		40		pF
Transition frequency	f_T	$V_{CE} = -2 V, I_C = -0.5 A$		120		MHz

RATINGS AND CHARACTERISTIC CURVES



RATINGS AND CHARACTERISTIC CURVES

