

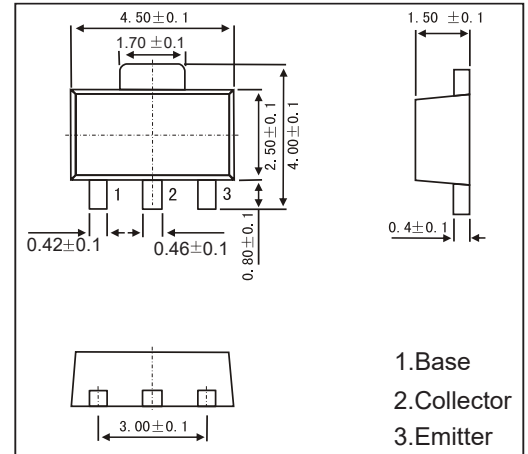
## SOT-89 Plastic-Encapsulate Transistors

### FEATURES

- Low collector-emitter saturation voltage
- High efficiency with low voltage power supply
- Satisfactory operation performances
- 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	$V_{CB0}$	40	V
Collector - Emitter Voltage	$V_{CEO}$	25	
Emitter - Base Voltage	$V_{EBO}$	7	
Collector Current - Continuous	$I_C$	3	A
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	$V_{CB0}$	$I_C=100\ \mu A, I_E=0$	40			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C=1\ mA, I_B=0$	25			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E=100\ \mu A, I_C=0$	7			
Collector-base cut-off current	$I_{CBO}$	$V_{CB}=40\ V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=7\ V, I_C=0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3\ A, I_B=100\ mA$			1	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=3\ A, I_B=100\ mA$			1.2	
DC current gain	$h_{FE}$	$V_{CE}=2\ V, I_C=500\ mA$	230		600	
		$V_{CE}=2\ V, I_C=2\ A$	150			
Collector output capacitance	$C_{ob}$	$V_{CB}=20\ V, I_E=0, f=1\ MHz$			50	$\mu F$
Transition frequency	$f_T$	$V_{CE}=6\ V, I_C=50\ mA, f=200\ MHz$		150		MHz