

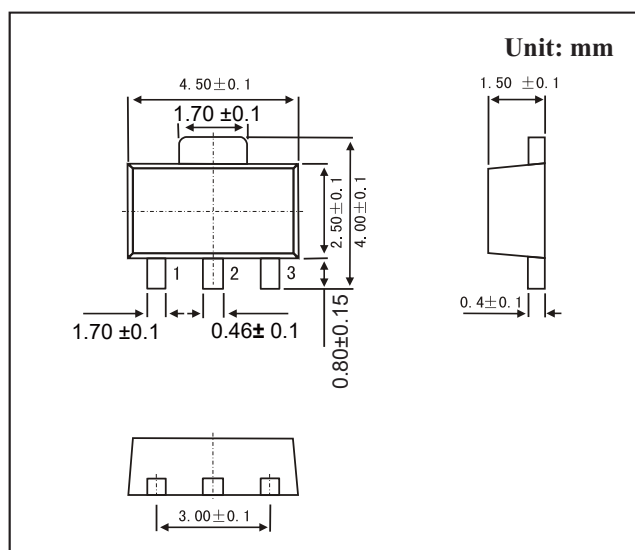
SOT-89 Plastic-Encapsulate Transistors

FEATURES

- Low Collector-Emitter Saturation Voltage
- High Breakdown Voltage
- TRANSISTOR (NPN)

MECHANICAL DATA

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



Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	310	V
V_{CEO}	Collector-Emitter Voltage	305	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	200	mA
I_{CM}	Collector Current -Pulsed	500	mA
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250	°C/W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	310			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	305			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=200V, I_E=0$			0.25	μA
	I_{CEX}	$V_{CE}=100V, V_X=5V$			5	μA
		$V_{CE}=300V, V_X=5V$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=10V, I_C=1mA$	60			
	$h_{FE(2)}$	$V_{CE}=10V, I_C=10mA$	100		300	
	$h_{FE(3)}$	$V_{CE}=10V, I_C=30mA$	75			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=20mA, I_B=2mA$			0.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=20mA, I_B=2mA$			0.9	V
Transition frequency	f_T	$V_{CE}=20V, I_C=10mA, f=30MHz$	50			MHz

Marking

Marking	A42
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