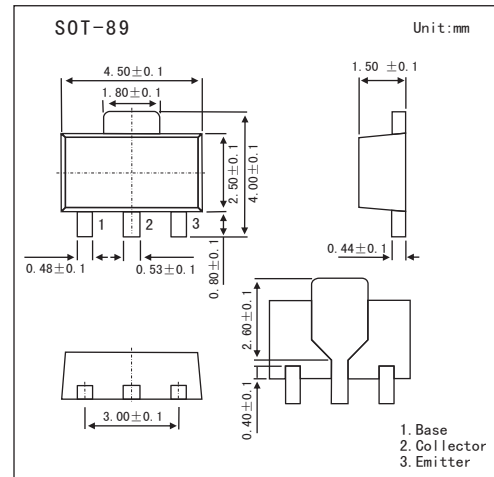


Silicon NPN Triple Diffused 2SC3380

Features

- High frequency high voltage amplifier
- High voltage switch



Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	300	V
Collector-emitter voltage	V_{CE0}	300	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	100	mA
Total power dissipation	P_C^*	1	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* Value on the alumina ceramic board (12.5 × 20 × 0.7 mm)

Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10 \mu\text{A}, I_E = 0$	300			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1 \text{ mA}, I_B = 0$	300			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10 \mu\text{A}, I_C = 0$	5			V
Collector cutoff current	I_{CE0}	$V_{CB} = 250\text{V}, I_B = 0$			1.0	μA
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 20 \text{ mA}, I_B = 2 \text{ mA}$			1.5	V
DC current gain	h_{FE}	$V_{CE} = 20\text{V}, I_C = 20\text{mA}$	30		200	
Transition frequency	f_T	$V_{CE} = 20\text{V}, I_C = 20\text{mA}$		80		MHz
Output Capacitance	C_{ob}	$V_{CB} = 20 \text{ V}, I_E = 0, f = 1.0 \text{ MHz}$			4	pF

Marking

Marking	AS