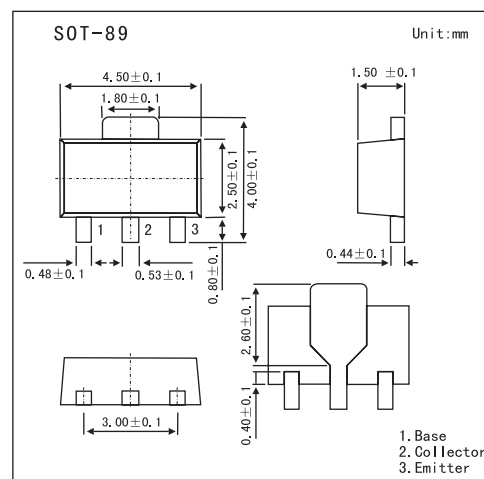


NPN Epitaxial Planar Silicon Transistor

2SC4984

■ Features

- Large current capacity.
- Low collector-to-emitter saturation voltage.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	15	V
Collector-emitter voltage	V_{CE0}	15	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	1.5	A
Collector current (pulse)	I_{CP}	3	A
Base current	I_B	300	mA
Collector dissipation, mounted on ceramic board (250mm ² × 0.8mm)	P_C	1.3	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

2SC4984■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = 12\text{ V}, I_E = 0$			100	nA
Emitter cutoff current	I_{EBO}	$V_{EB} = 4\text{ V}, I_C = 0$			100	nA
DC current gain	h_{FE}	$V_{CE} = 2\text{ V}, I_C = 50\text{ mA}$	140		560	
Gain bandwidth product	f_T	$V_{CE} = 2\text{ V}, I_C = 50\text{ mA}$		200		MHz
Output capacitance	C_{ob}	$V_{CB} = 10\text{ V}, f = 1.0\text{ MHz}$		10		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 5\text{ mA}, I_B = 0.5\text{ mA}$		10	25	mV
		$I_C = 500\text{ mA}, I_B = 25\text{ mA}$		120	240	
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500\text{ mA}, I_B = 25\text{ mA}$		0.9	1.2	mV
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	15			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{ mA}, R_{BE} = \infty$	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	5			V

■ h_{FE} Classification

Marking	CT		
Rank	S	T	U
h_{FE}	140~280	200~400	280~560