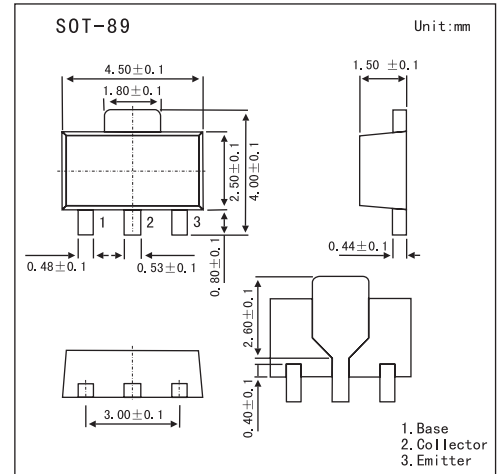


NPN Epitaxial Planar Silicon Transistors

2SC3651

■ Features

- High DC current gain
- High breakdown voltage
- Low collector-to-emitter saturation voltage
- High V_{EBO} ($V_{EBO} \geq 15V$)
- Very small size making it easy to provide high-density small-sized hybrid IC's.

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

Parameter	Symbol	Rating	Unit
collector-base voltage	V_{CB0}	120	V
collector-emitter voltage	V_{CE0}	100	V
emitter-base voltage	V_{EBO}	15	V
collector current	I_C	200	mA
Collector Current (pulse)	I_{CP}	300	mA
Collector Dissipation	P_C	500	mA
		1.3 *	W
Junction Temperature	T_J	150	$^\circ C$
storage Temperature	T_{stg}	-55 to 150	$^\circ C$

*Mounted on ceramic board (250mm²X0.8mm)

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
collector cutoff Current	I_{CBO}	$V_{CB}=80V, I_E=0$			0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=10V, I_C=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=10mA$	500	1000	2000	
		$V_{CE}=5V, I_C=100mA$	400			
Gain-Bandwidth product	f_T	$V_{CE}=10V, I_C=10mA$		150		MHz
Output Capacitance	c_{ob}	$V_{CB}=10V, f=1MHz$		6.5		pF
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=2mA$		0.15	0.5	V
Base to Emitter Stauration Voltage	$V_{BE(sat)}$	$I_C=100mA, I_E=2mA$				V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$				V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$				V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$				V

■ Marking

Marking	CG
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