

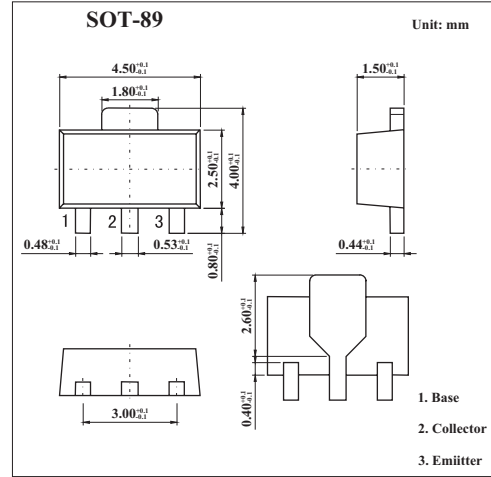


SOT-89 Plastic-Encapsulate Transistors

HC-G1 Surface Mount NPN Silicon Transistor

■ Features

- High current (max. 500mA).
- Low voltage (max. 150 V).



■ Absolute Maximum Ratings Ta = 25°C

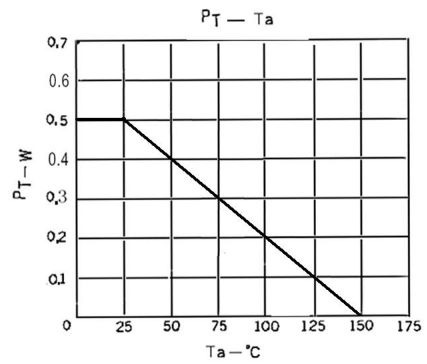
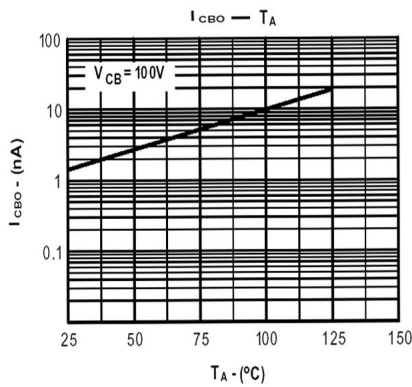
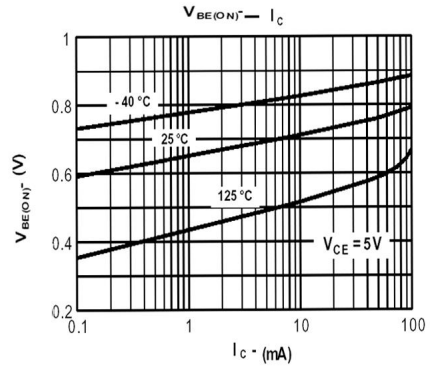
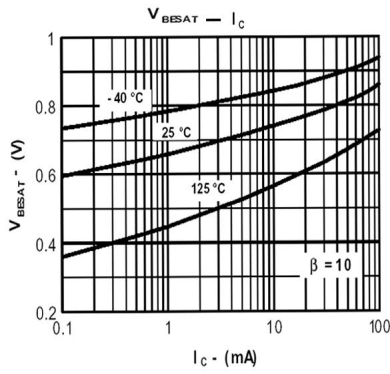
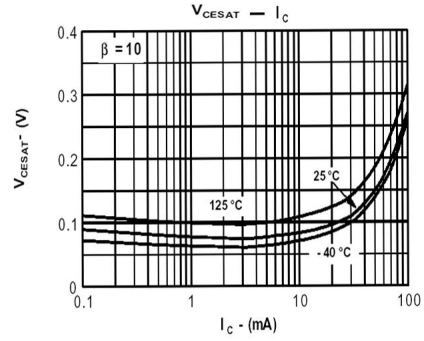
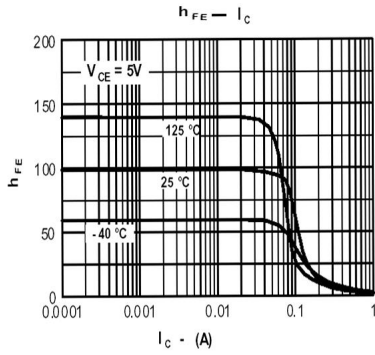
Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	180	V
Collector-emitter voltage	V _{CEO}	160	V
Emitter-base voltage	V _{EBO}	6	V
Collector current (DC)	I _C	600	mA
power dissipation	P _D	1.2	W
thermal resistance Junction-to-ambient	R _{θJA}	104	°C/W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-65 to +150	°C

■ Electrical Characteristics Ta = 25°C

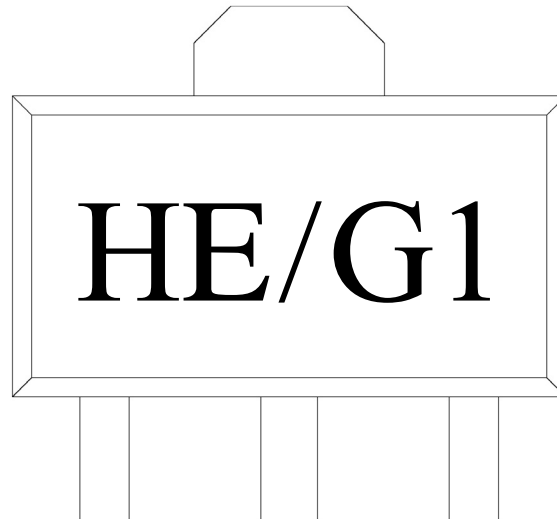
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	V _{CB0}	I _C =100 μ A	180			V
Collector to emitter breakdown voltage	V _{CEO}	I _C =1.0mA	160			V
Emitter to base breakdown voltage	V _{EBO}	I _E =10 μ A	6.0			V
Collector cutoff current	I _{CB0}	V _{CB} = 120 V, I _E = 0			50	nA
		V _{CB} = 120 V, T _A =100°C			50	μ A
DC current gain	h _{FE}	I _C = 1.0 mA; V _{CE} = 5.0 V	80			
		I _C = 10mA; V _{CE} = 5.0V	80		250	
		I _C = 50 mA; V _{CE} = 5.0V	30			
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 10 mA; I _B = 1.0mA			0.15	V
		I _C = 50 mA; I _B = 5.0mA			0.20	V
Base to emitter saturation voltage	V _{BE(sat)}	I _C = 10 mA; I _B = 1.0mA			1.00	V
		I _C = 50 mA; I _B = 5.0mA			1.00	V
Output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f=1.0MHz			6.0	pF
Transition frequency	f _T	I _C = 10 mA; V _{CE} = 10V; f = 100 MHz	100		300	MHZ

HC-G1

电参数曲线图 / Electrical Characteristic Curve



印章说明 / Marking Instructions



说明：

H: : 为公司代码

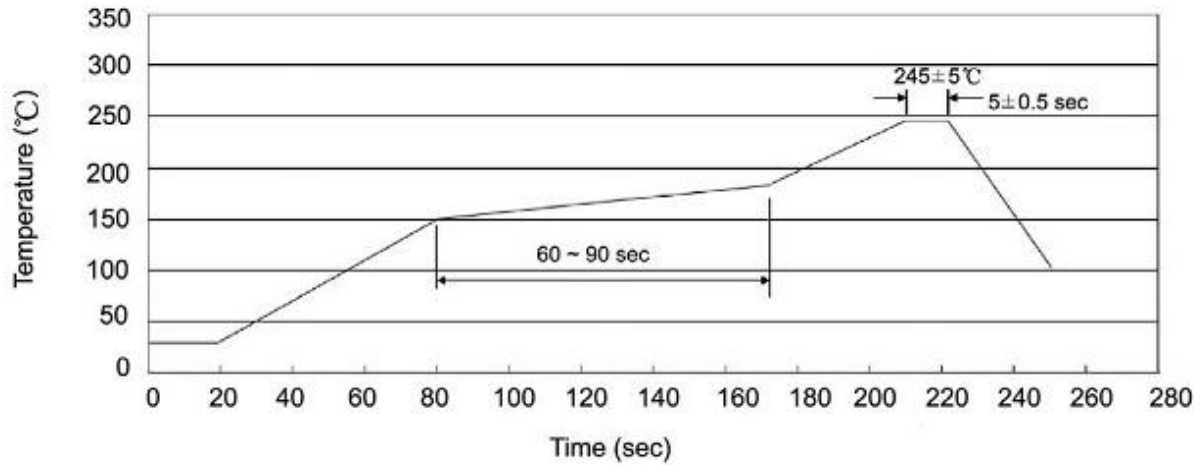
G1 : 为型号代码

Note:

HC: Company Code.

G1: Product Type.

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

- 1、预热温度 150 ~ 180°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

Time:10±1 sec