

/ Descriptions

Silicon PNP transistor in a SOT-89 Plastic Package.

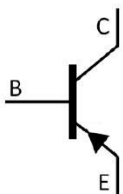
• / Features

Low voltage, high current, Complementary to BC868.

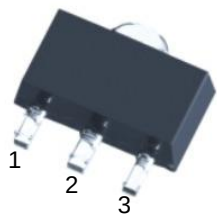
v / Applications

Low voltage, high current applications.

≈ / Equivalent Circuit



λ / Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

. 𐄂 / Marking

Marking	HCEC* *
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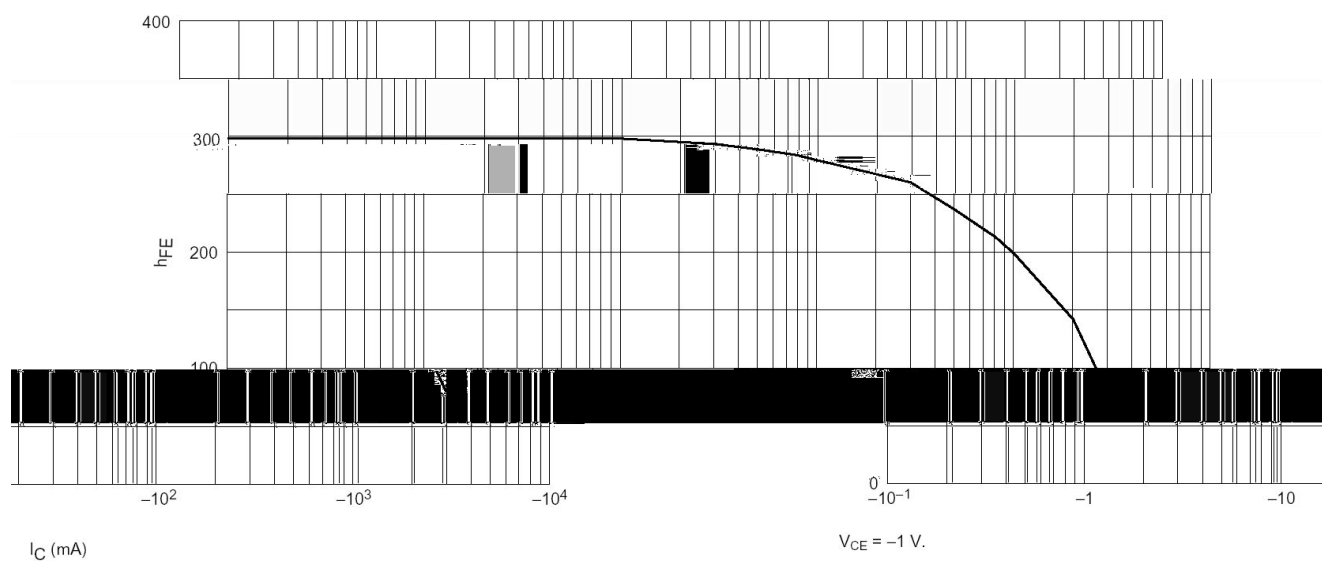
⚡ / Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-32	V
Collector to Emitter Voltage	V_{CEO}	-20	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current-Continuous	I_C	-1.0	A
Peak Collector Current	I_{CM}	-2.0	A
Peak Base Current	I_{BM}	-200	mA
Collector Power Dissipation	P_C	1.35	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

⚡ / Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-25V$ $I_E=0$			-0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-1.0V$ $I_C=-500mA$	100		375	
	$h_{FE(2)}$	$V_{CE}=-10V$ $I_C=-5.0mA$	50			
	$h_{FE(3)}$	$V_{CE}=-1.0V$ $I_C=-1.0A$	60			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-1.0A$ $I_B=-100mA$			-500	mV
Base to Emitter Voltage	$V_{BE(1)}$	$I_C=-5.0mA$ $V_{CE}=-10V$		-620		mV
	$V_{BE(2)}$	$I_C=-1.0A$ $V_{CE}=-1.0V$			-1.0	V
Transition Frequency	f_T	$V_{CE}=-5.0V$ $I_C=-10mA$ $f=100MHz$	40			MHz

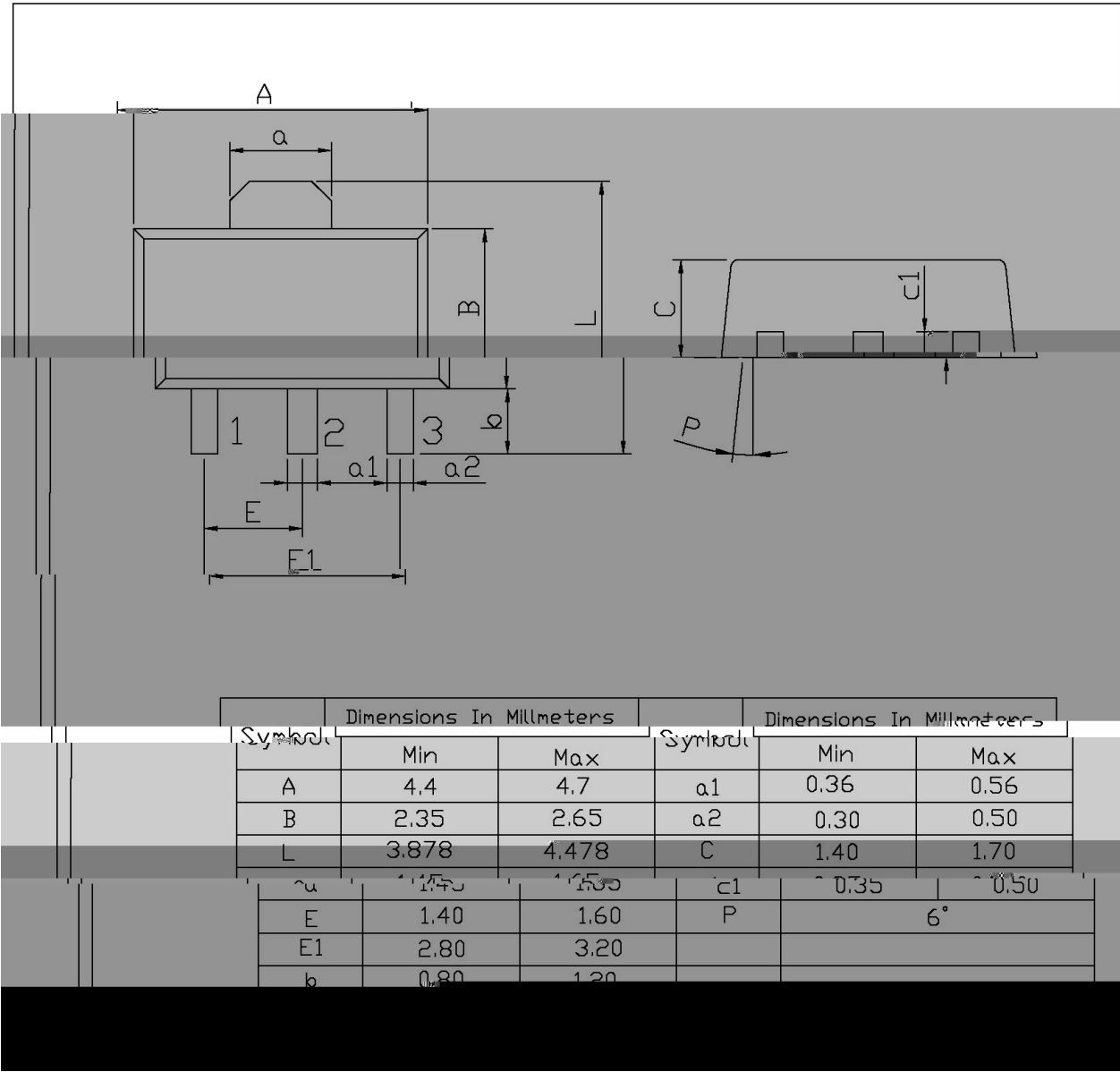
■ M / Electrical Characteristic Curve



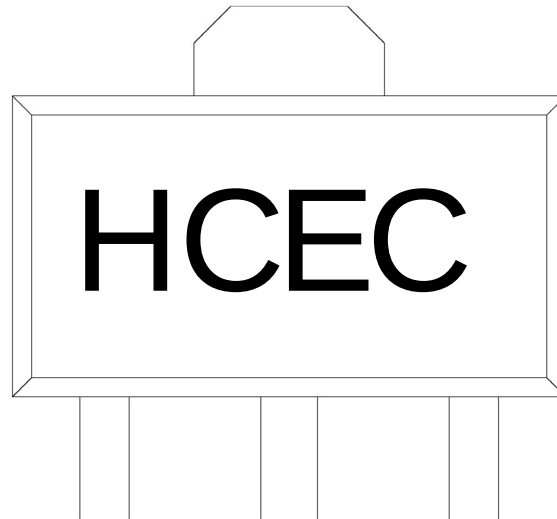
/ Package Dimensions

SOT-89

单位：mm



/ Marking Instructions



H
CEC

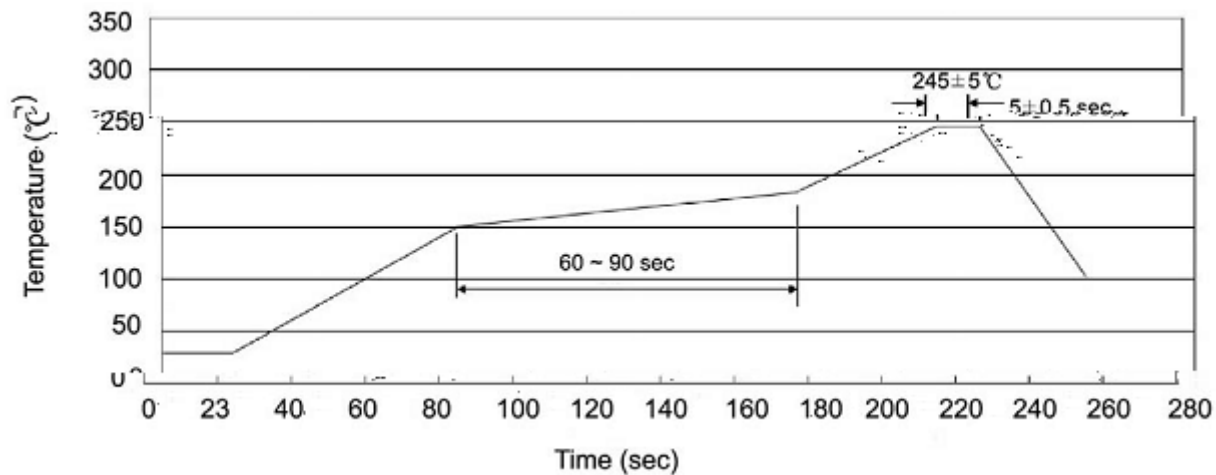
Note:

H: Company Code.

CEC: Product Type.

** : Lot No. Code, code change with Lot No.

3. Soldering Heat Test Conditions



Note:

1. Preheating: 25~150 °C, Time: 60~90sec.
2. Peak Temp.: 245±5 °C, Duration: 5±0.5sec.
3. Cooling Speed: 2~10 °C/sec.

4. Resistance to Soldering Heat Test Conditions

260±5 °C, 10±1 sec. Temp.: 260±5 °C Time: 10±1 sec

5. Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOT-89	1,000	7	7,000	8	56,000	7" ×12"	180×120×180	385×257×392

6. Notices