

/ Descriptions

SOT-89 PNP Silicon PNP transistor in a SOT-89 Plastic Package.

/ Features

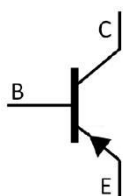
2SD1898

High breakdown voltage, good h_{FE} linearity, low $V_{CE(sat)}$, complements the 2SD1898.

/ Applications

General power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ Marking

h_{FE} Classifications Symbol	P	Q	R
h_{FE} Range	82 180	120 270	180 390
Marking	HBHP*	HBHQ*	HBHR*

/ Absolute Maximum Ratings(Ta=25 –)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-80	V
Collector to Emitter Voltage	V_{CEO}	-80	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current-Continuous	I_C	-1.0	A
Collector Current-Continuous(Pulse)	$*I_{CP}$	-2.0	A
Collector Power Dissipation	$**P_C$	0.5	W
	$*P_C$	2.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*Single pulse $P_w=100ms$ 100ms
 **mounted on 40×40×0.7mm ceramic board 40×40×0.7m

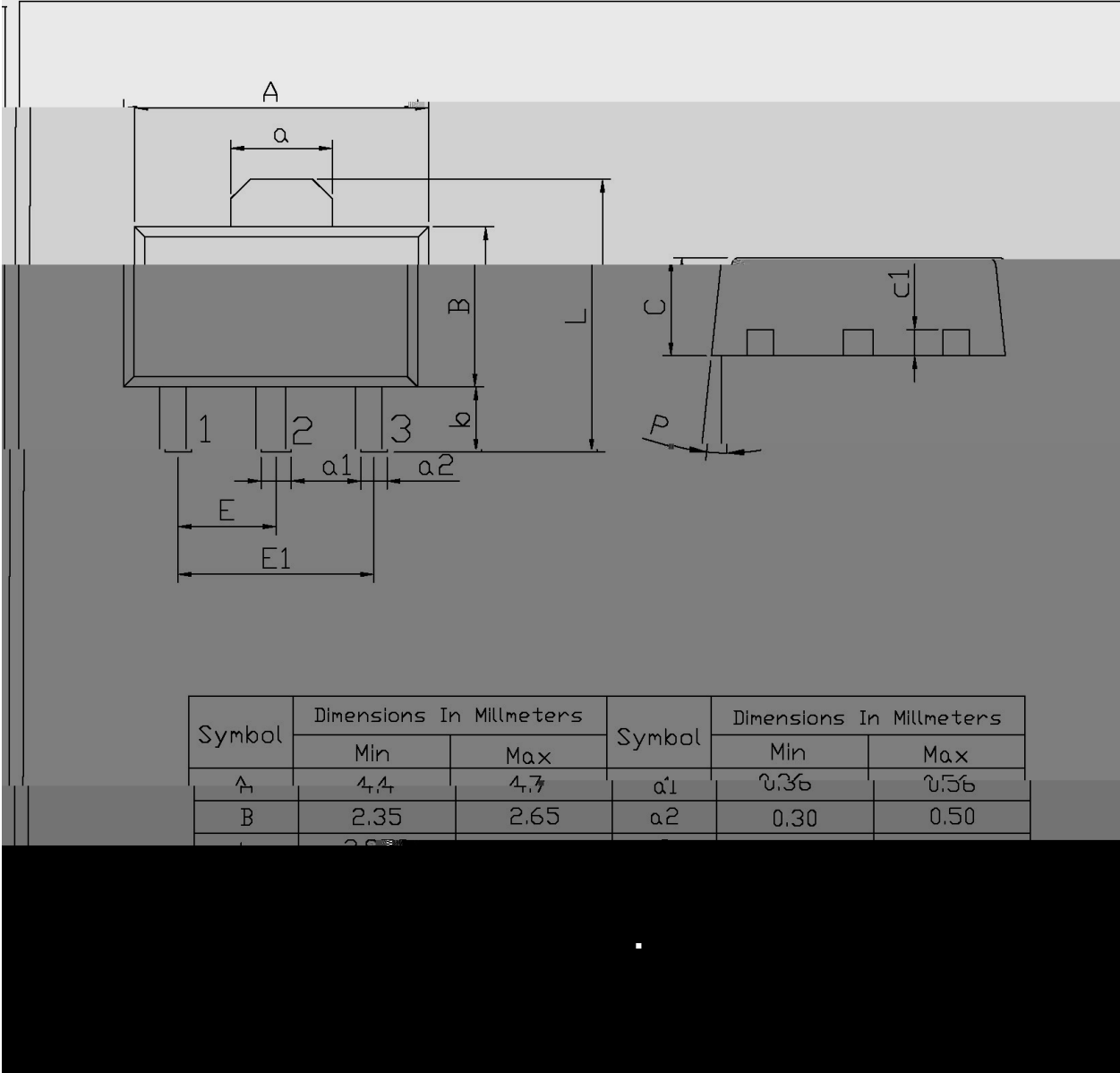
/ Electrical Characteristics(Ta=25 –)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-50 A$ $I_E=0$	-80			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1.0mA$ $I_B=0$	-80			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-50 A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-60V$ $I_E=0$			-1.0	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-4.0V$ $I_C=0$			-1.0	A
DC Current Gain	h_{FE}	$V_{CE}=-3.0V$ $I_C=-0.1A$	82		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$			-0.4	V
Transition Frequency	f_T	$V_{CE}=-5.0V$ $f=30MHz$ $I_C=-50 mA$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CE}=-10V$ $f=1.0MHz$ $I_E=0$		25		pF

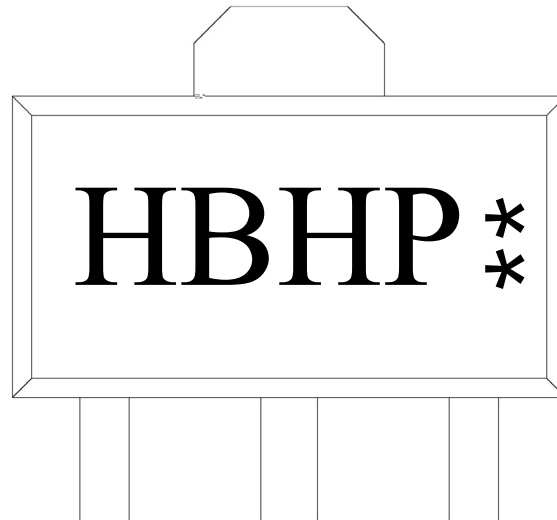
/ Package Dimensions

STT-89

单位: mm



/ Marking Instructions



H

BH

P h_{FE}

**

Note:

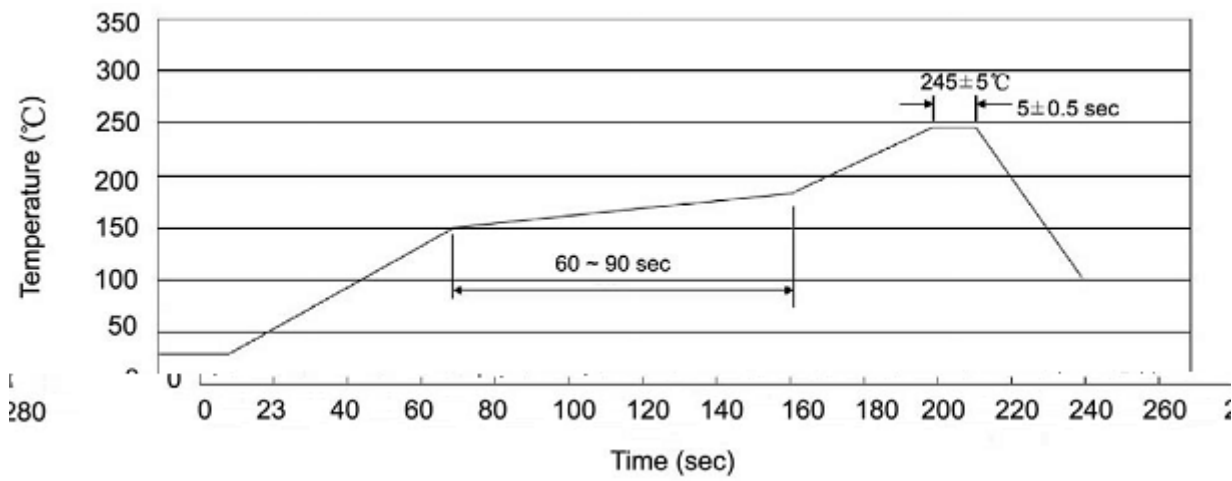
H: Company Code.

BH: Product Type.

P h_{FE} Classifications Symbol

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

() / Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0luhh,



Note:

- 1

25 150

60 90sec;

1.Preheating:25~150 , Time:60~90sec.
- 2

245±5

5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ 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		