

BR2SB1260Q

Rev.A Apr.-2023

SOT-89

PNP

Silicon PNP transistor in a SOT-89 Plastic Package.

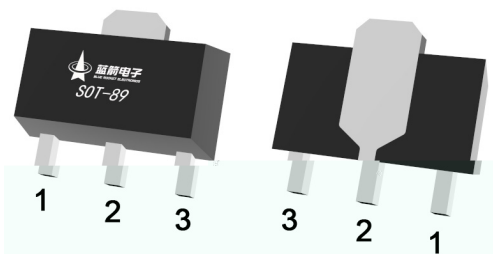
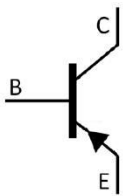
BR2SD1898Q

AEC-Q101

High breakdown voltage, good h_{FE} linearity, low $V_{CE(sat)}$, complements the BR2SD1898Q, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

General power amplifier applications, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



PIN1 Base

PIN 2 Collector

PIN 3 Emitter

/ 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 Pw=100ms

100ms

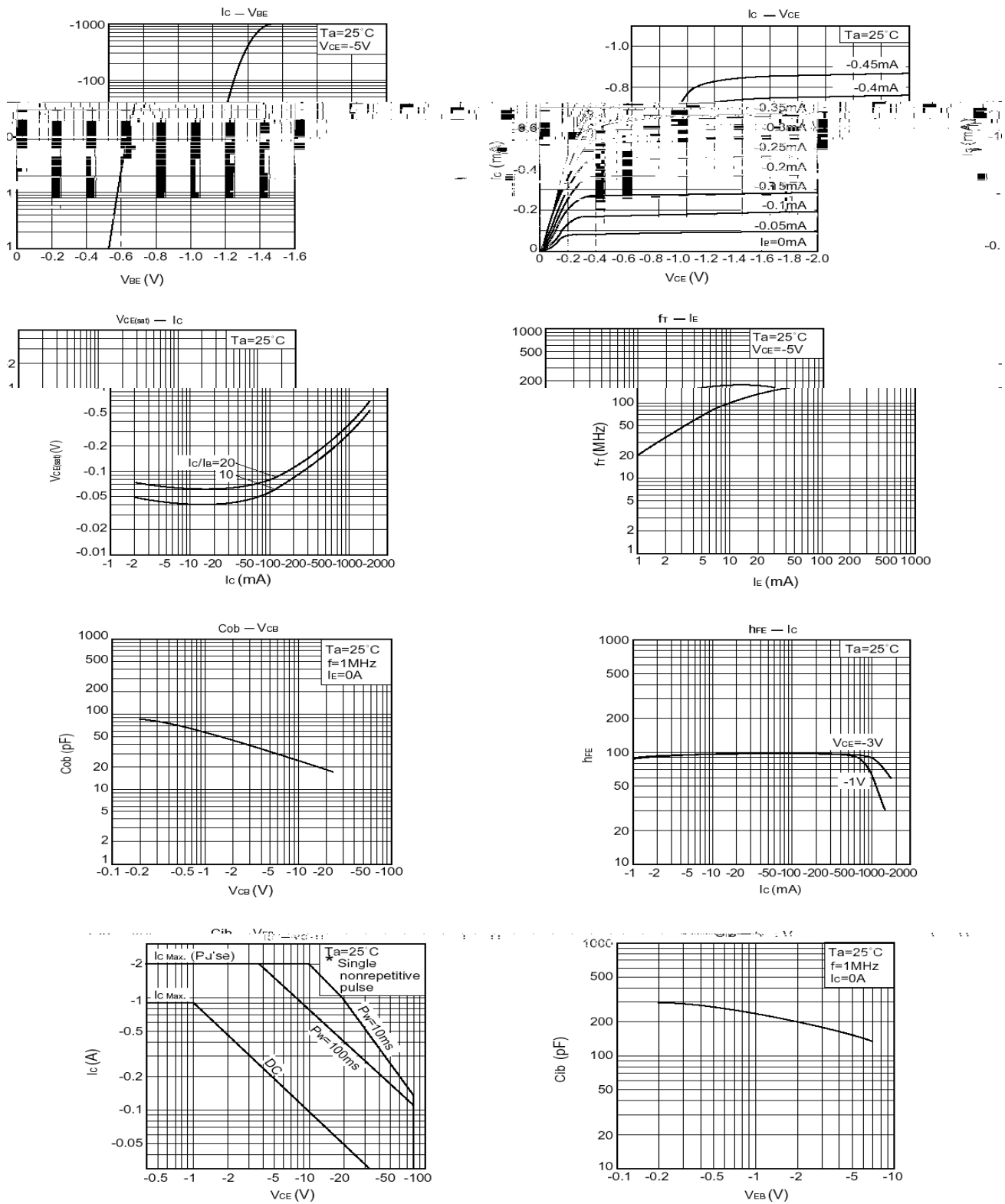
**mounted on 40×40×0.7mm ceramic board

40×40×0.7m

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-50\mu A$ $I_E=0$	-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}	$I_E=-50\mu A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-60V$ $I_E=0$			-1.0	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=-4.0V$ $I_C=0$			-1.0	μA
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	$V_{CE}=-5.0V$ $I_C=-50mA$ $f=30MHz$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CE}=-10V$ $I_E=0$ $f=1.0MHz$		25		pF

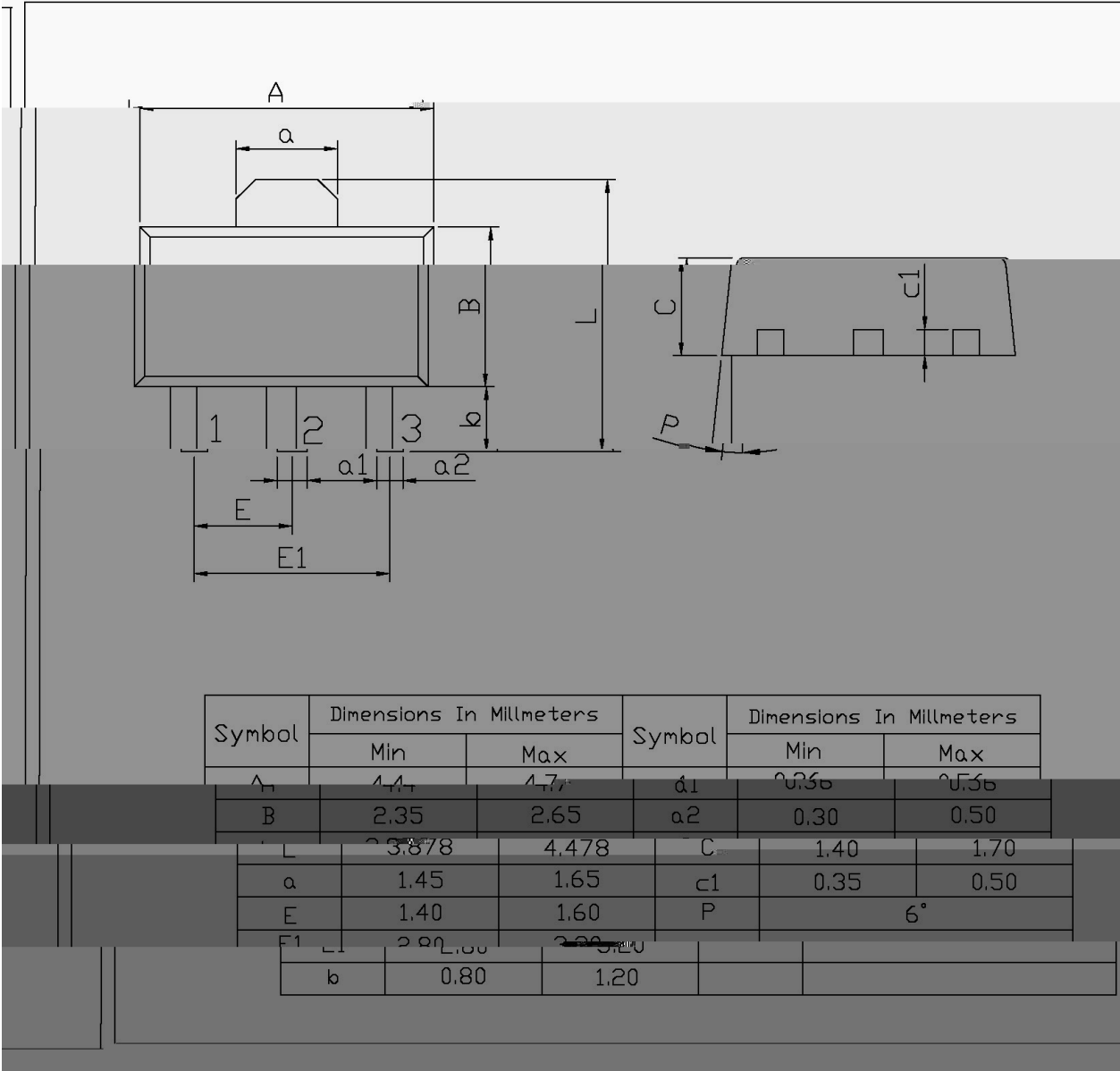
/ Electrical Characteristic Curve



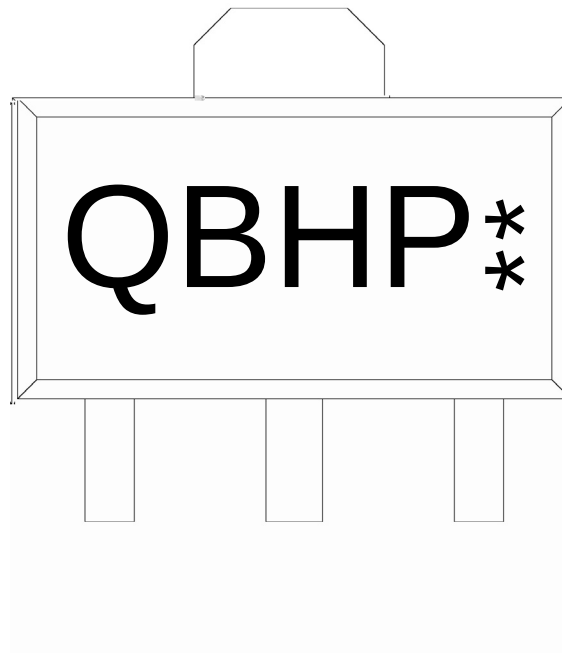
/ Package Dimensions

321-89

单位: mm



/ Marking Instructions



Q

BH

P h_{FE}

**

Note:

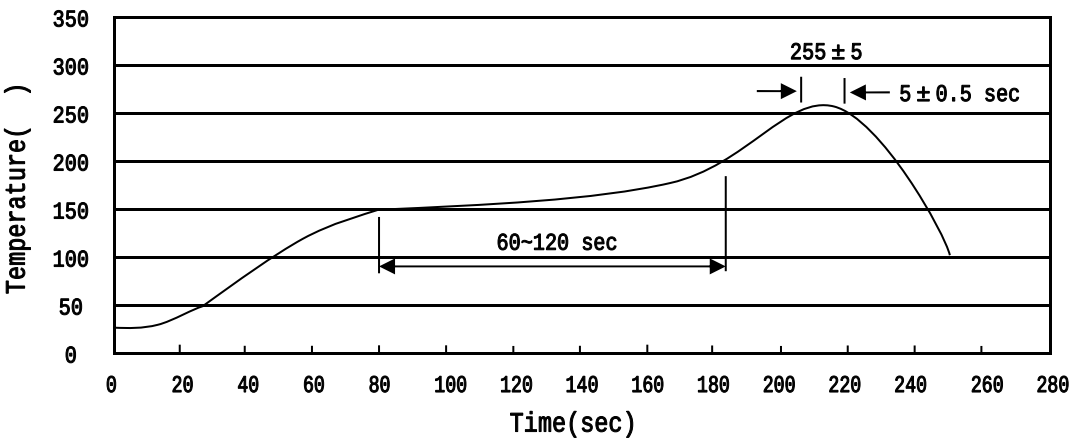
Q: Automobile halogen-free product Code

BH: Product Type

P h_{FE} Classifications Symbol

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

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 200

60 120sec;

1.Preheating:150~200 , Time:60~120sec.
- 2

255±5

5±0.5sec;

2.Peak Temp.:255±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	Units					Dimension (unit mm³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-89	1,000	7	7,000	6	42,000	7 ×12	180×120×180	390×385×205

/ Notices