

1. 2SB1424 / Descriptions

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

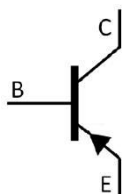
2. 2SB1424 / Features

Low $V_{CE(sat)}$, excellent DC current gain characteristics.

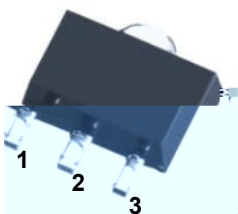
3. 2SB1424 / Applications

General purpose amplifier.

4. 2SB1424 / Equivalent Circuit



5. 2SB1424 / Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

6. 2SB1424 / Marking

h_{FE} Classifications Symbol	Q	R
h_{FE} Range	120 270	180 390
Marking	HAEQ	HAER

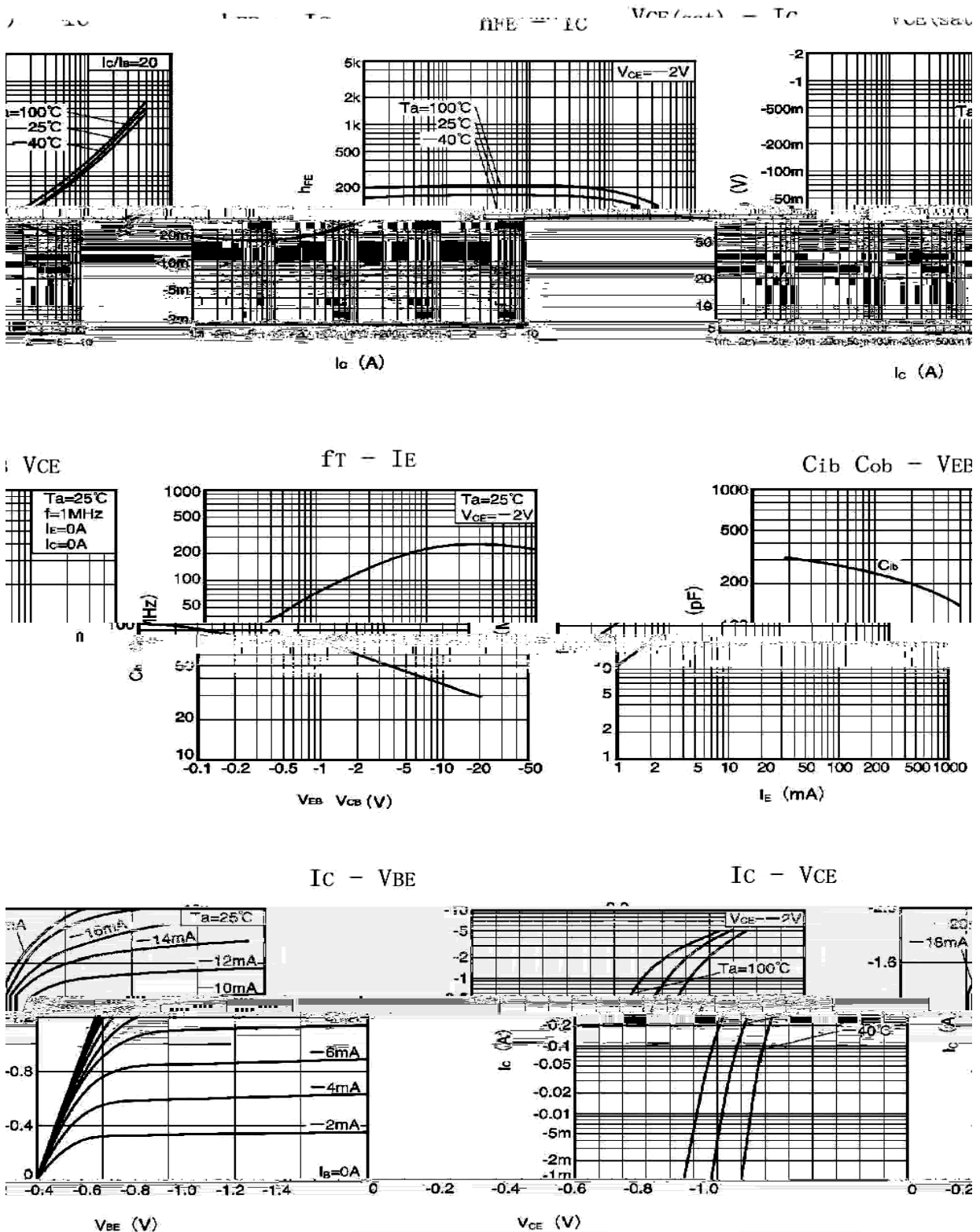
绝对最大额定值 (Ta=25℃)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-20	V
Collector to Emitter Voltage	V_{CEO}	-20	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current-Continuous	I_C	-3.0	A
Collector Current -Continuous(Pulse)	I_{CP}	-5.0	A
Collector Power Dissipation	P_C	0.6	W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

电 气 特 性 (Ta=25℃)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C = -50\text{ A}$ $I_E = 0$	-20			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C = -1.0\text{mA}$ $I_B = 0$	-20			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E = -50\text{ A}$ $I_C = 0$	-6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -20\text{V}$ $I_E = 0$			-0.1	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB} = -5.0\text{V}$ $I_C = 0$			-0.1	A
DC Current Gain	h_{FE}	$V_{CE} = -2.0\text{V}$ $I_C = -0.1\text{A}$	120		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -2.0\text{A}$ $I_B = -0.1\text{A}$			-0.5	V
Transition Frequency	f_T	$V_{CE} = -2.0\text{V}$ $I_C = -0.5\text{A}$ $f = 100\text{MHz}$		240		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{V}$ $I_E = 0$ $f = 1.0\text{MHz}$		35		pF

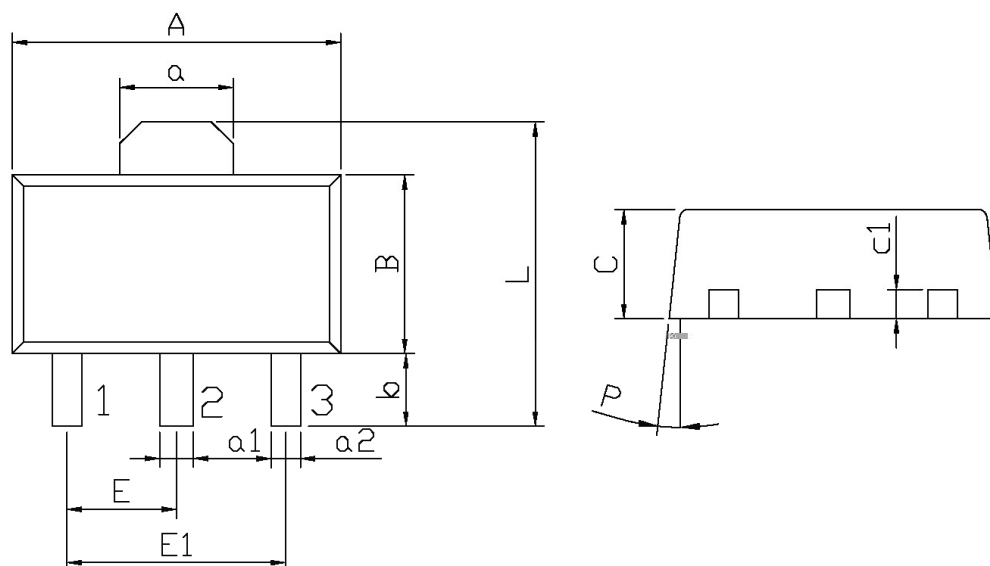
Electrical Characteristic Curve



⌘ È Ò Ì ð / Package Dimensions

SOT-89

单位: mm

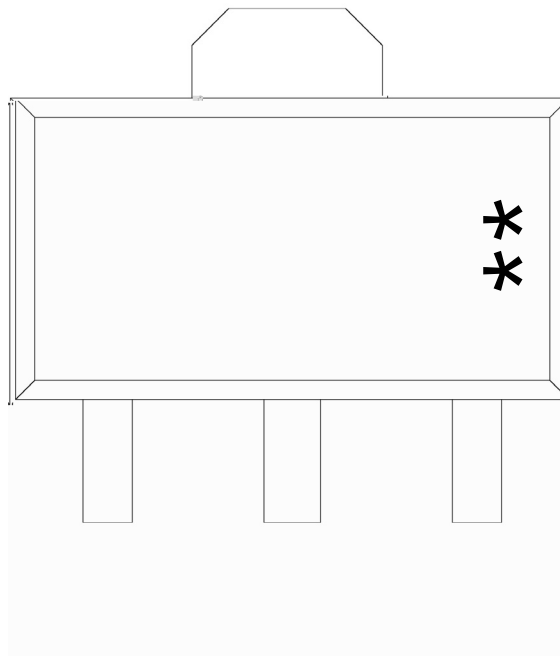


Dimensions in Millimeters

Dimensions in Millimeters

L	3.878	4.478	C	1.40	1.70
a	1.45	1.65	c1	0.35	0.50
E	1.40	1.60	P	6°	
E1	2.80	3.20			
b	0.80	1.20			

1. 符号 / Marking Instructions



H

AE

Q: h_{FE}

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Note:

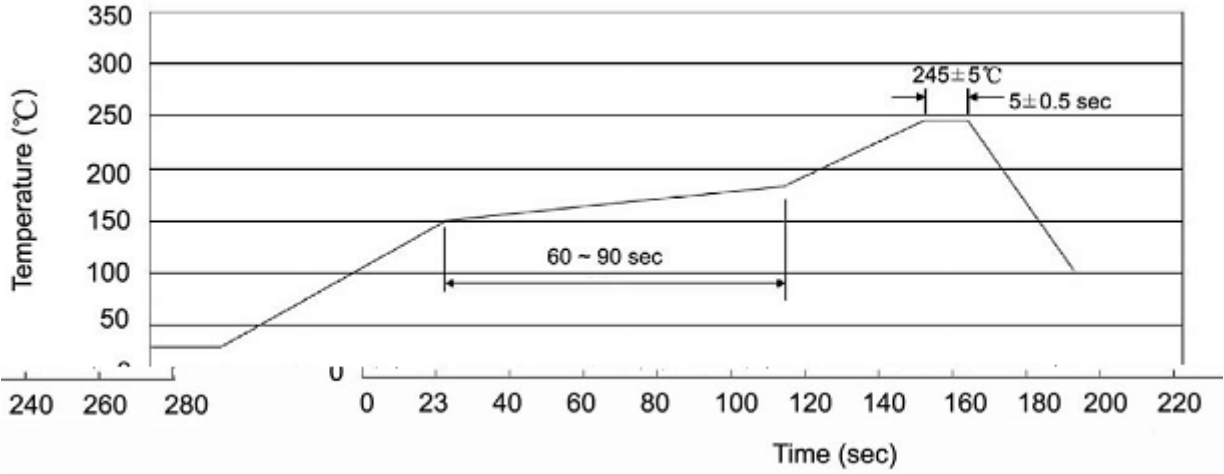
H: Company Code.

AE: Product Type.

Q: h_{FE} Classifications Symbol

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

Whp shudwxuh Suriloh i ru LU Uhior z Vroghulqj+Se0lueh,



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	180×120×180	385×257×392

Notices