

/ Descriptions

SOT-323 NPN Silicon NPN transistor in a SOT-323 Plastic Package.

• / Features

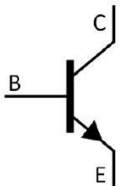
BC807W

High current, low voltage complementary pair with BC807W.

v / Applications

General purpose switching and amplification.

≈ / Equivalent Circuit



λ / Pinning



PIN1 Emitter PIN 2 Base PIN 3 Collector

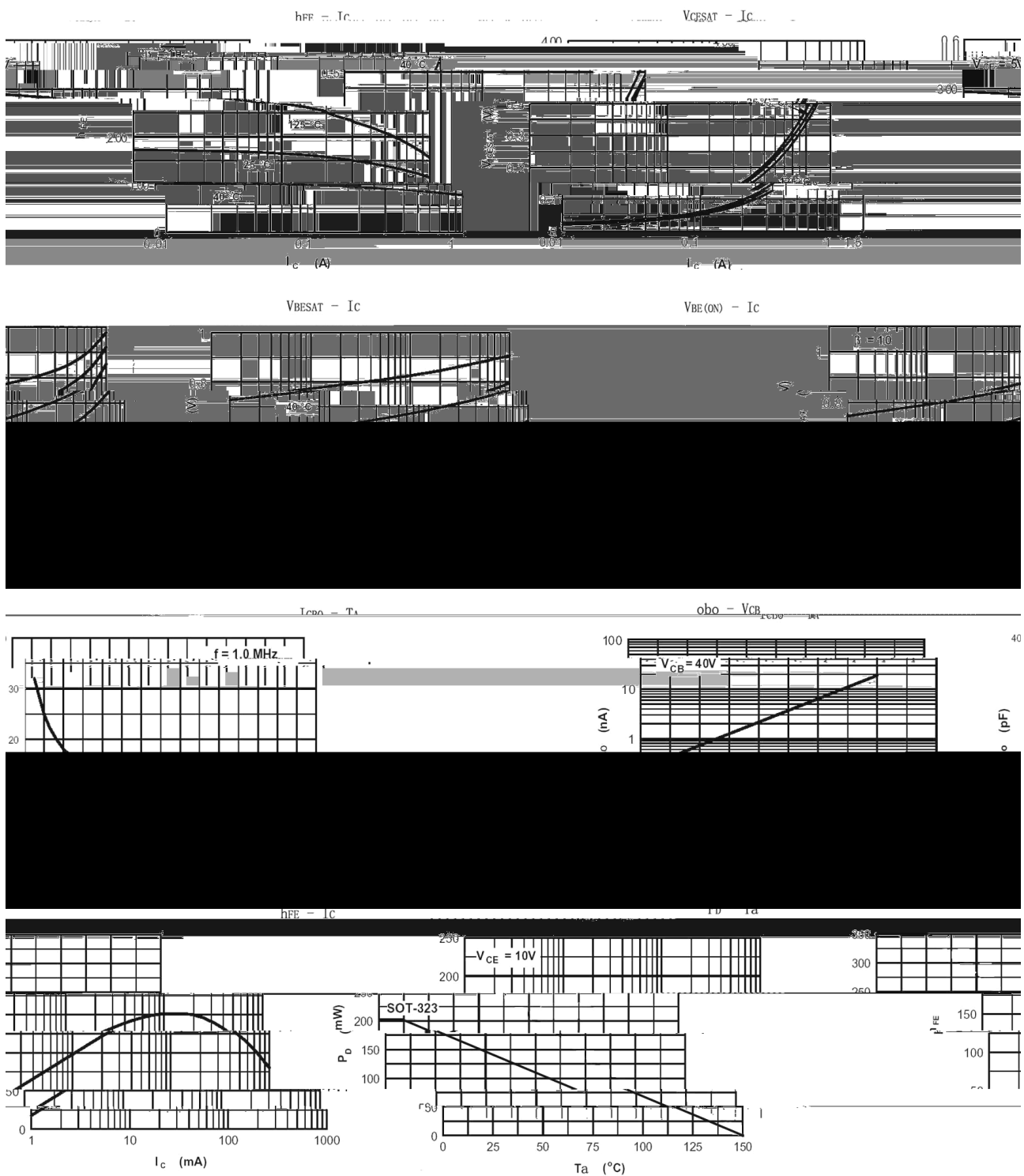
⌂ / Marking

h_{FE} Classifications Symbol	16	25	40
h_{FE} Range	100 250	160 400	250 600
Marking	H6A	H6B	H6C

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	500	mA
Peak Collector Current - Continuous	I_{CM}	1.0	A
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=20V$ $I_E=0$			5.0	A
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			0.1	A
DC Current Gain	h_{FE}	$V_{CE}=1.0V$ $I_C=100mA$	100		600	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$			0.7	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=1.0V$ $I_C=500mA$			1.2	V

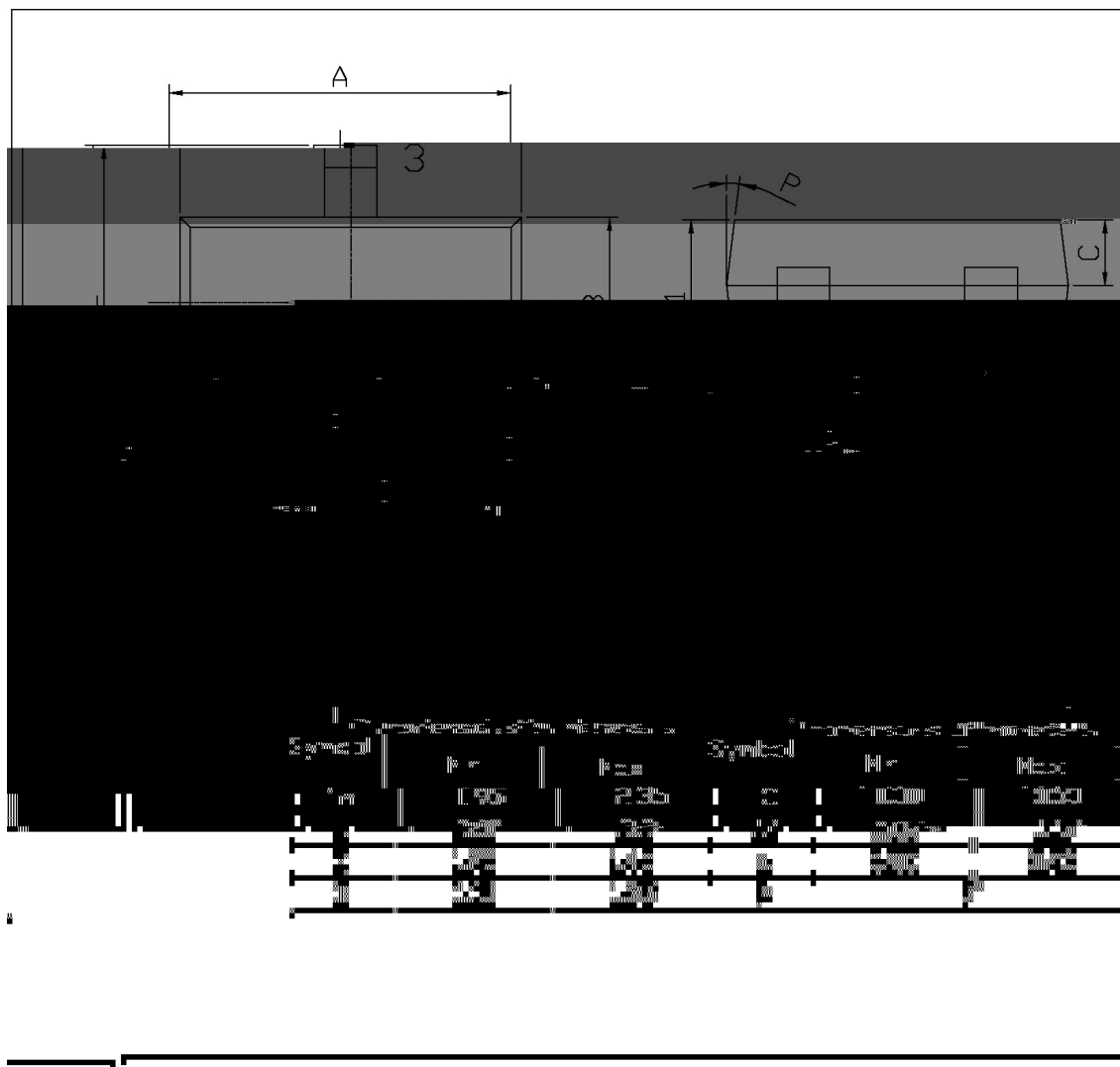
Electrical Characteristic Curve



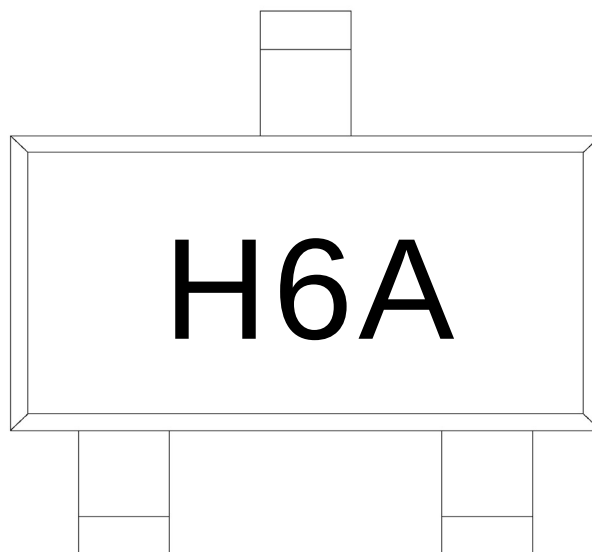
/ Package Dimensions

SOT-323

单位: mm



/ Marking Instructions



H

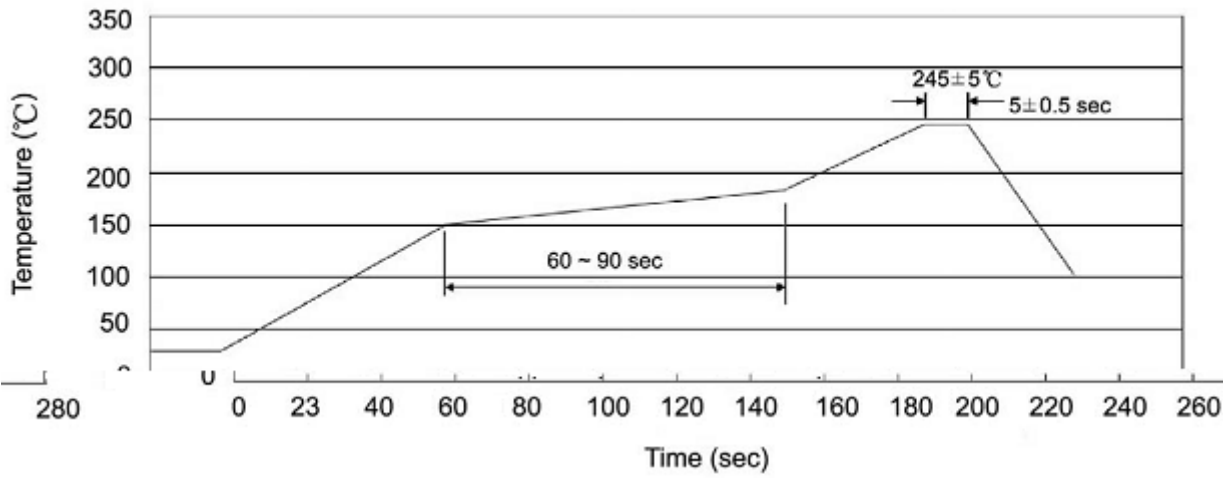
6A

Note:

H: Company Code.

6A: Product Type.

3. Soldering Heat Conditions



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. |

4. Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

5. Packaging SPEC.

5.1 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-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

6. Notices