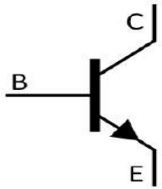


Silicon NPN transistor in a SOT-23 Plastic Package.

High I_C , complementary pair with BC807.

Purpose: General power amplifier and switching application.

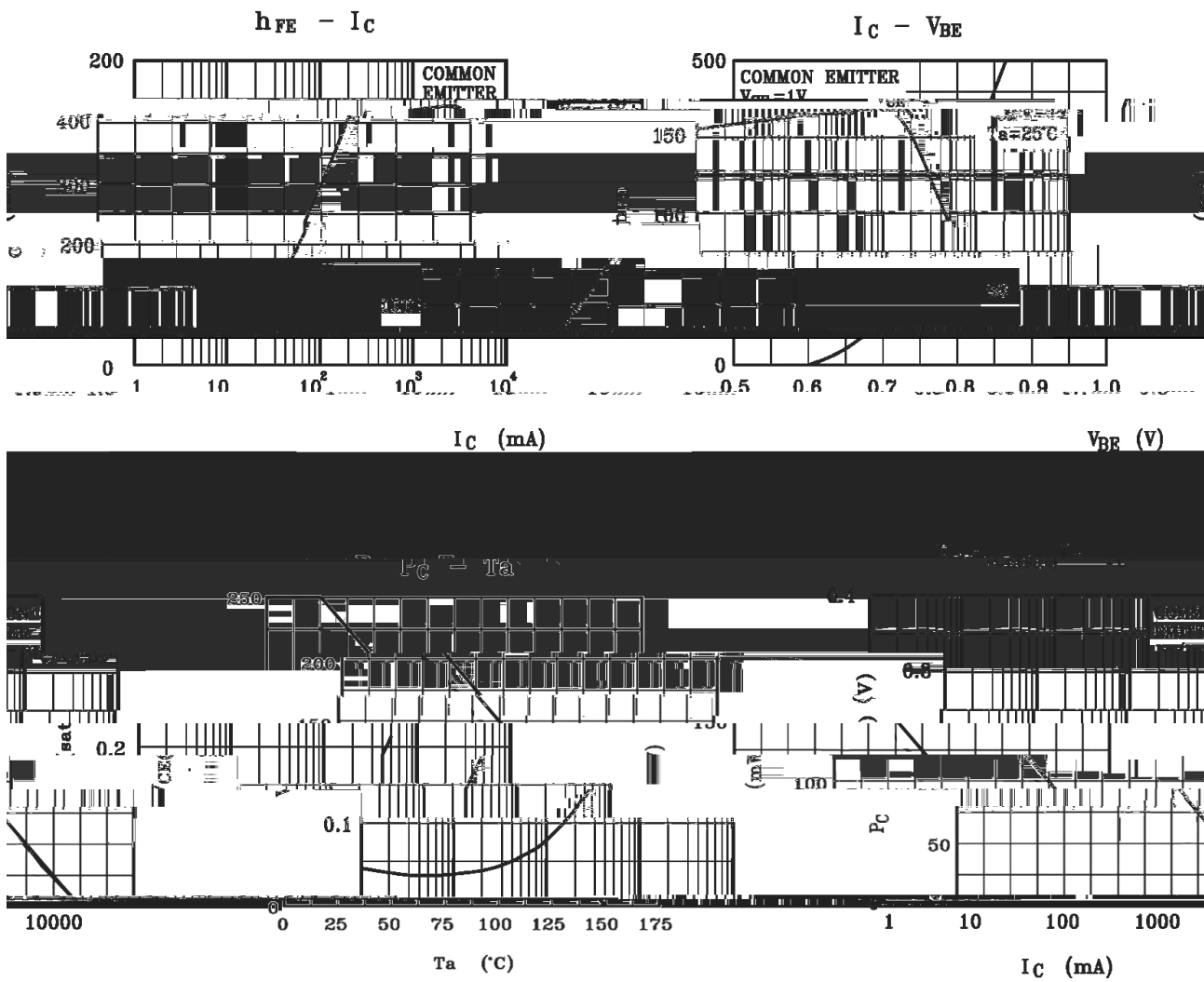


PIN1 Base PIN 2 Emitter PIN 3 Collector

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

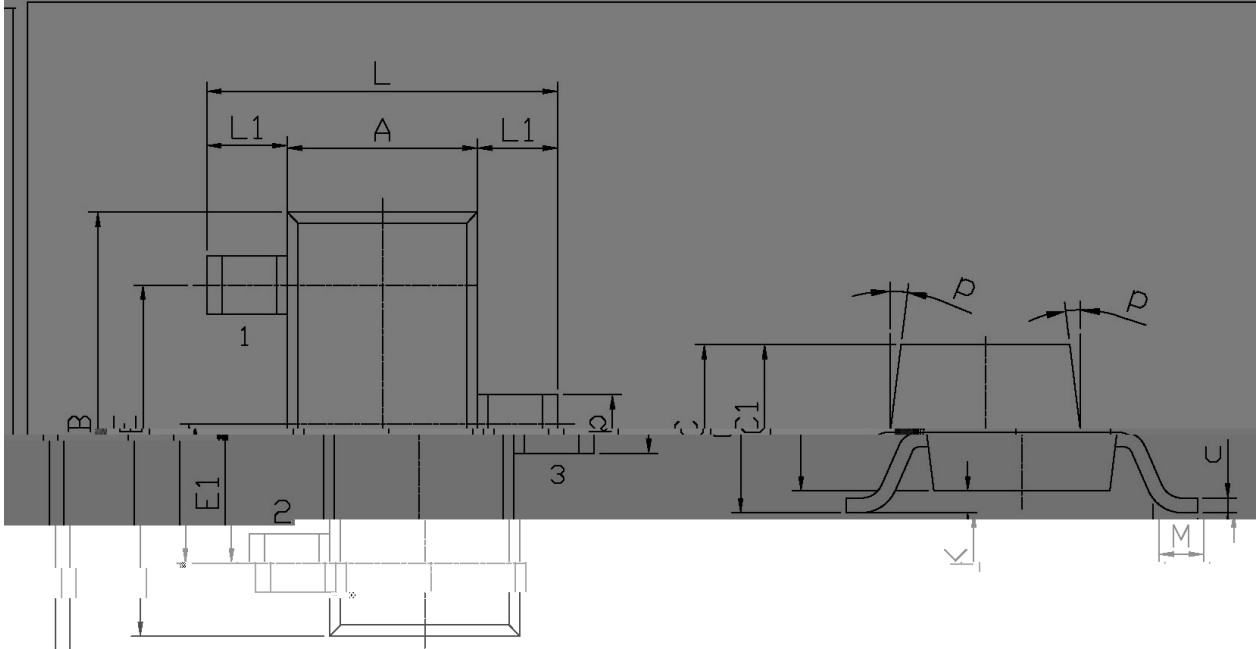
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	45	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	500	mA
Collector Current - peak collector current	I_{CM}	1.0	A
Collector Power Dissipation	P_C	250	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\text{ A}$ $I_E=0$	50			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=10\text{mA}$ $I_B=0$	45			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\mu\text{A}$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=20\text{V}$ $I_E=0$			0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0\text{V}$ $I_E=0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0\text{V}$ $I_C=100\text{mA}$	100		600	
	$h_{FE(2)}$	$V_{CE}=1.0\text{V}$ $I_C=500\text{mA}$	40			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$ $I_B=50\text{mA}$			0.7	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=1.0\text{V}$ $I_C=500\text{mA}$			1.2	V
Transition Frequency	f_T	$V_{CE}=5.0\text{V}$ $I_C=10\text{mA}$	100			MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$ $f=1.0\text{MHz}$ $I_E=0$		5.0		pF

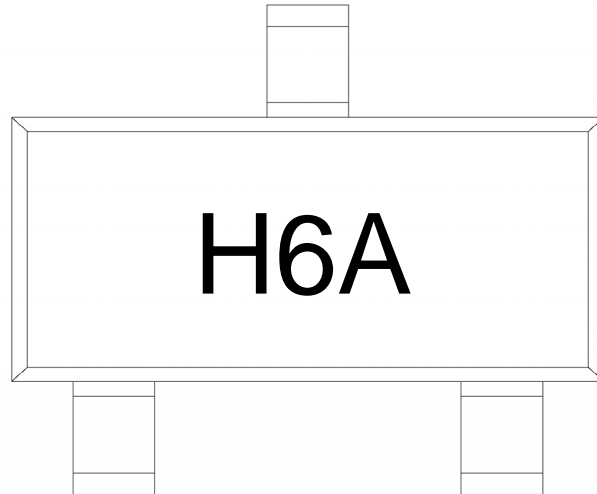


SMT-23

单位: mm



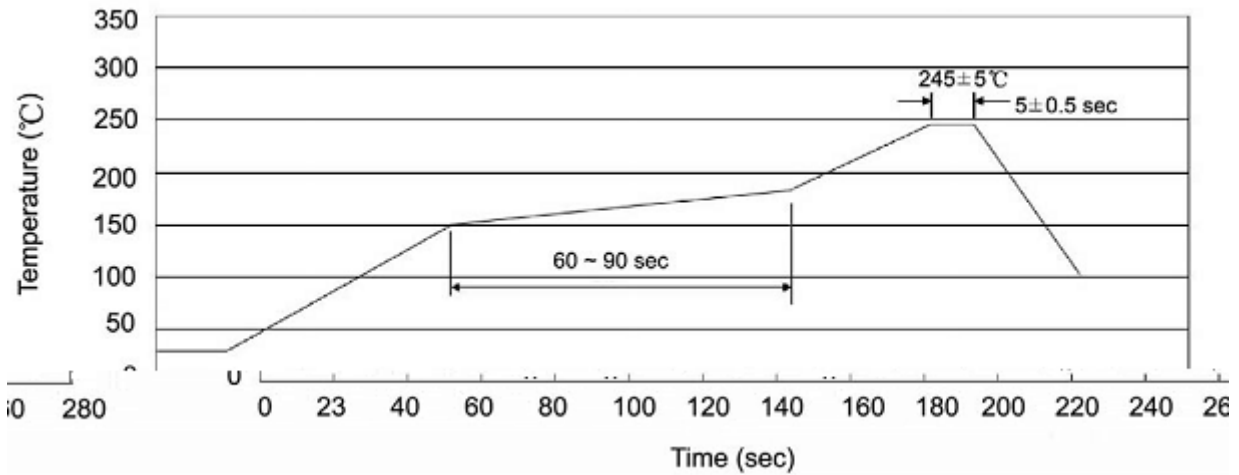
Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	Min	Max
L	2.2	2.7	C	1.30Max	
L1	0.45	0.65	C1	0.90	1.20
A	1.15	1.50	c	0.05	0.20
E1	0.35	0.55	P		
b	0.35	0.55			



Note:

H: Company Code

6A: Product Type Code

Temperature Profile for IR Reflow Soldering(Pb-Free)


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. |

260	5	10	1 sec.	Temp.:260±5	Time:10±1 sec
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/ 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-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205