/ Descriptions

SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

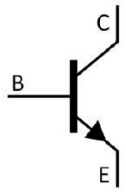
, 2SA933M

Small base output capacitance, complementary pair with 2SA933M.

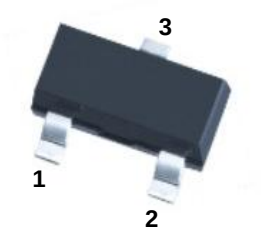
/ Applications

General purpose amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

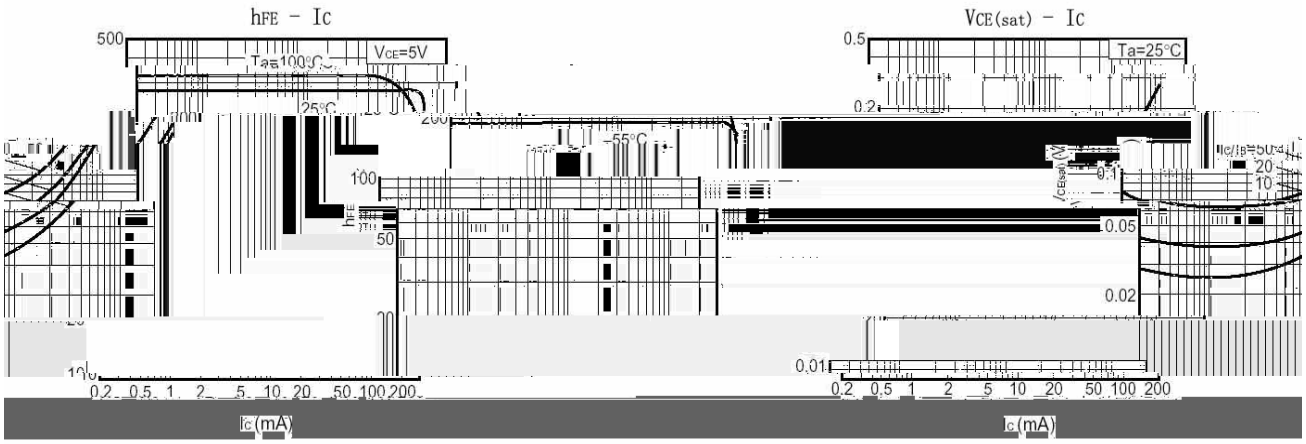
/ h_{FE} Classifications & Marking

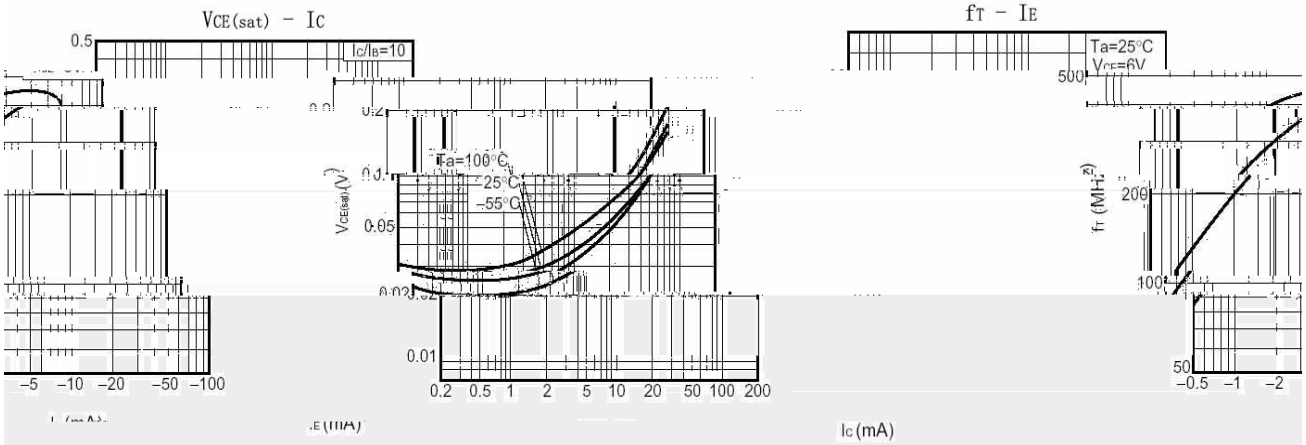
h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	120 270	180 390	270 560
Marking	BQH	BRH	BSH

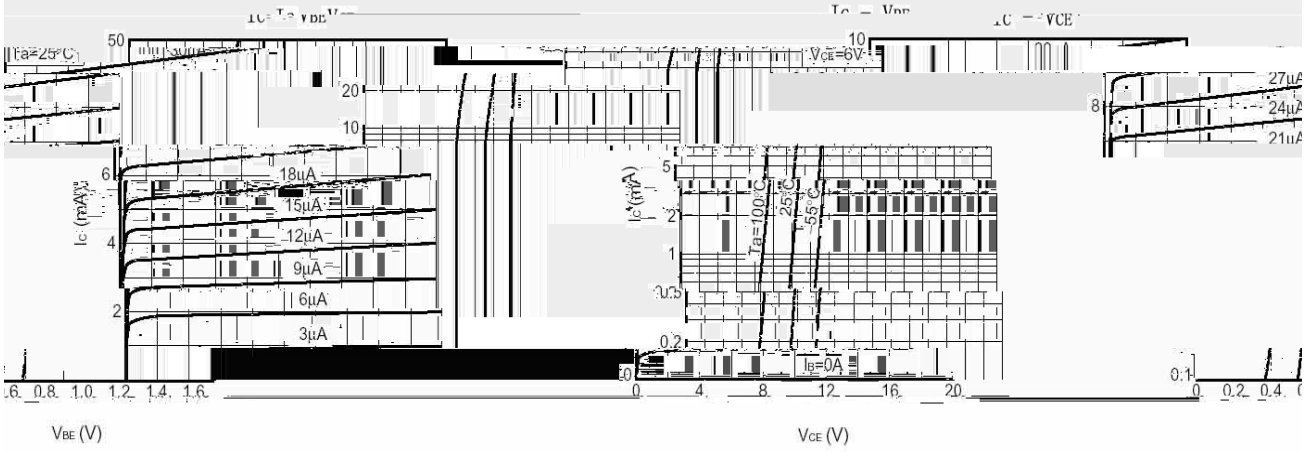
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current	I_C	150	mA
Collector Power Dissipation	P_C	250	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V_{CBO}	I_C=50μA I_E=0	60			V
Collector-Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	50			V
Emitter-Base Breakdown Voltage	V_{EBO}	I_E=50μA I_C=0	7.0			V

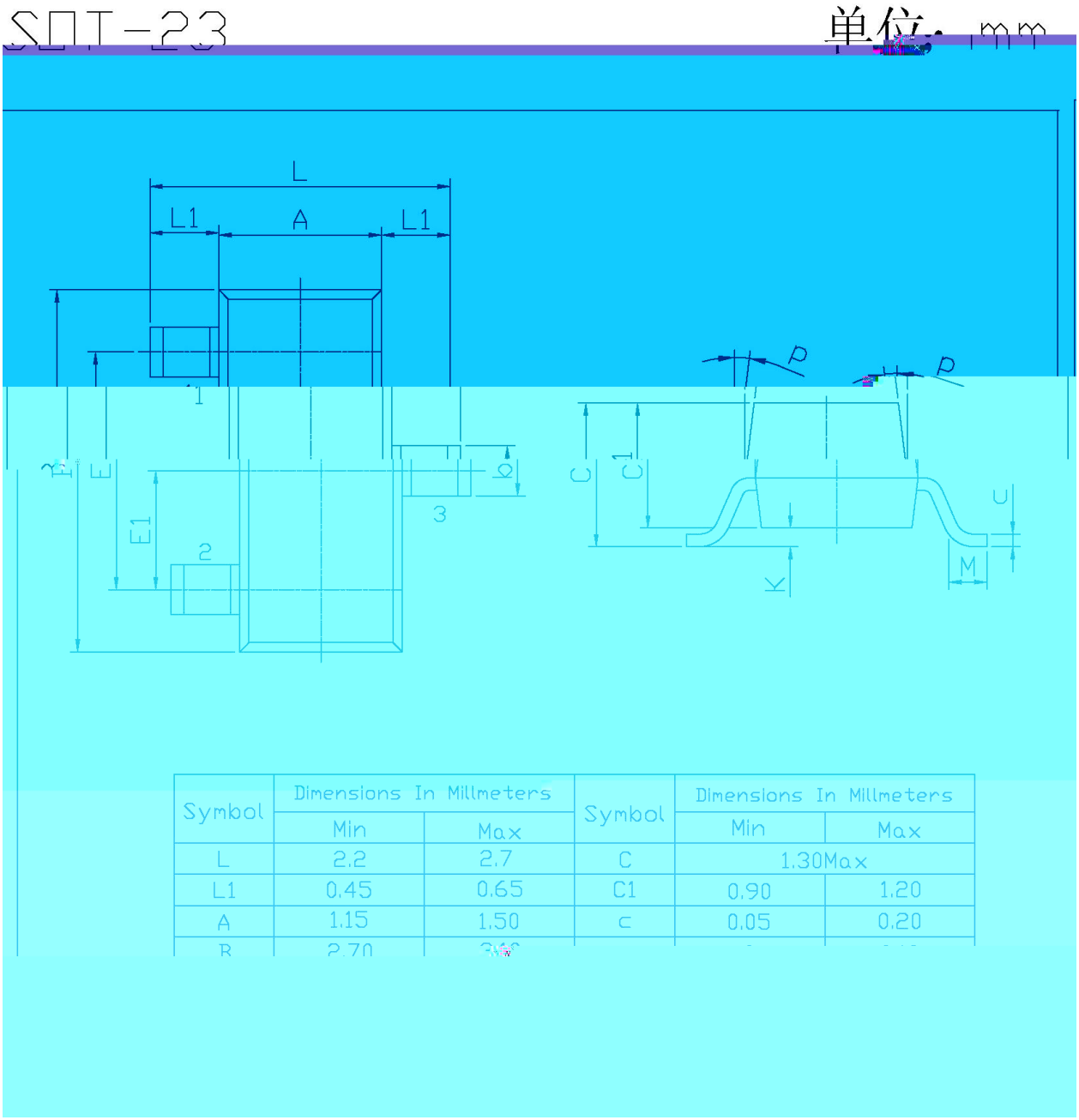
/ Electrical Characteristic Curve





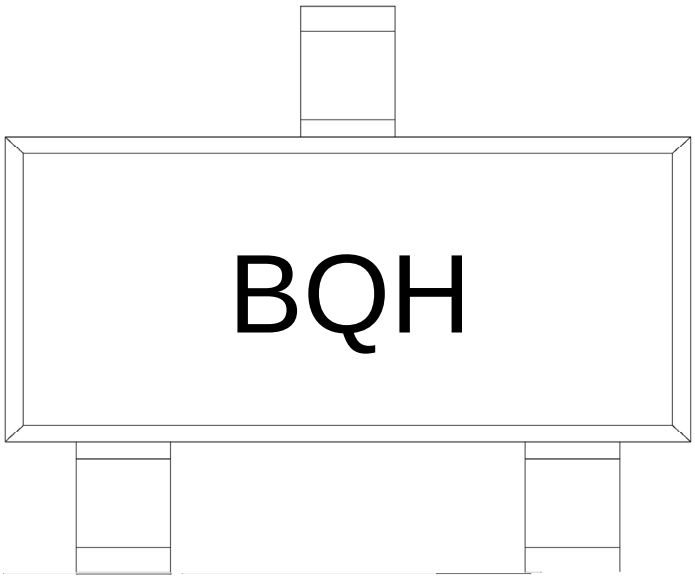


/ Package Dimensions



Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min	Max		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
R	2.70				

/ Marking Instructions



B

Q: h_{FE}

H

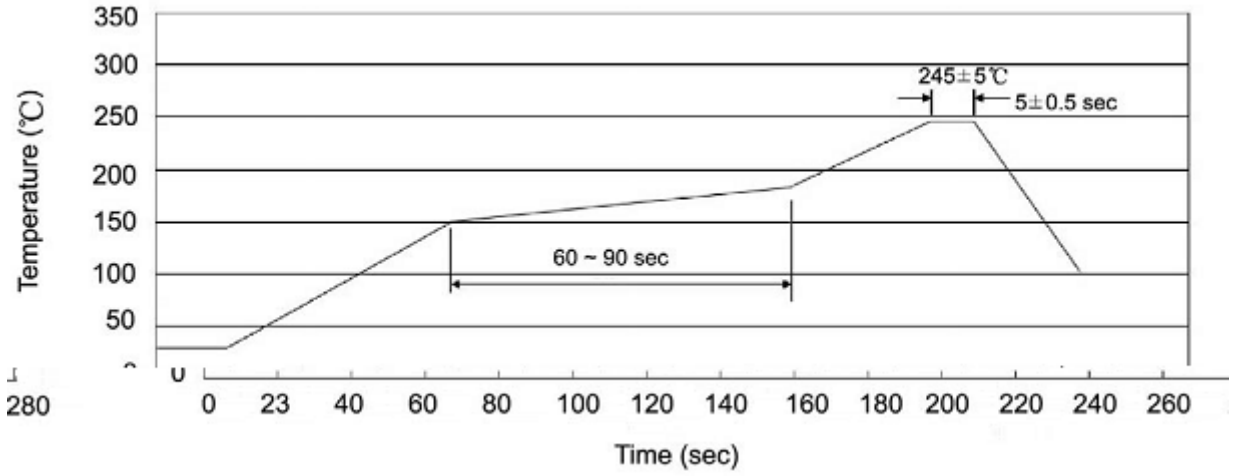
Note:

B: Product Type Code

Q: h_{FE} Classifications Symbol Code

H: Company 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.

/ 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-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices