/ Descriptions

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

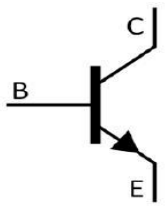
/ Features

Low current, high voltage.

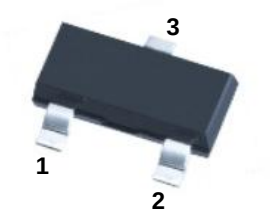
/ Applications

Telephony and professional communication equipment.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

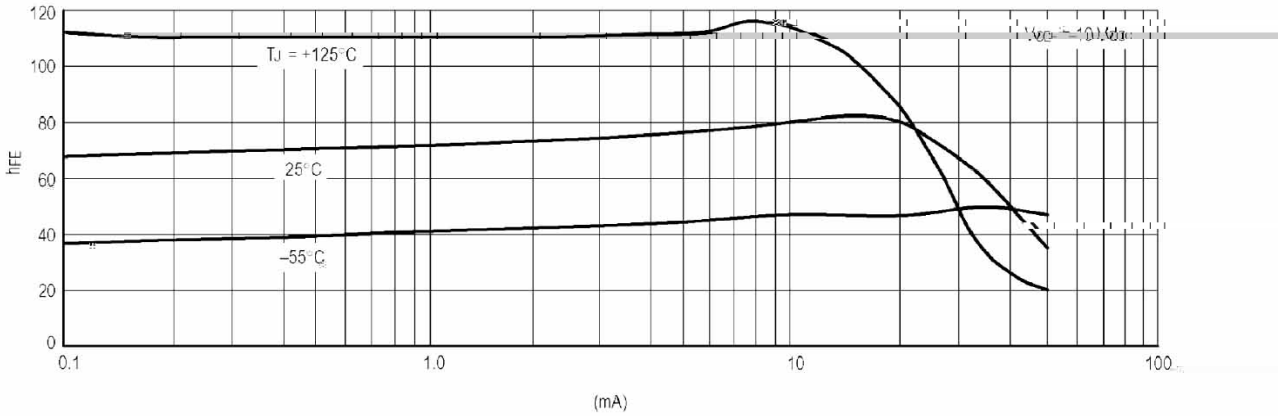
/ h_{FE} Classifications & Marking

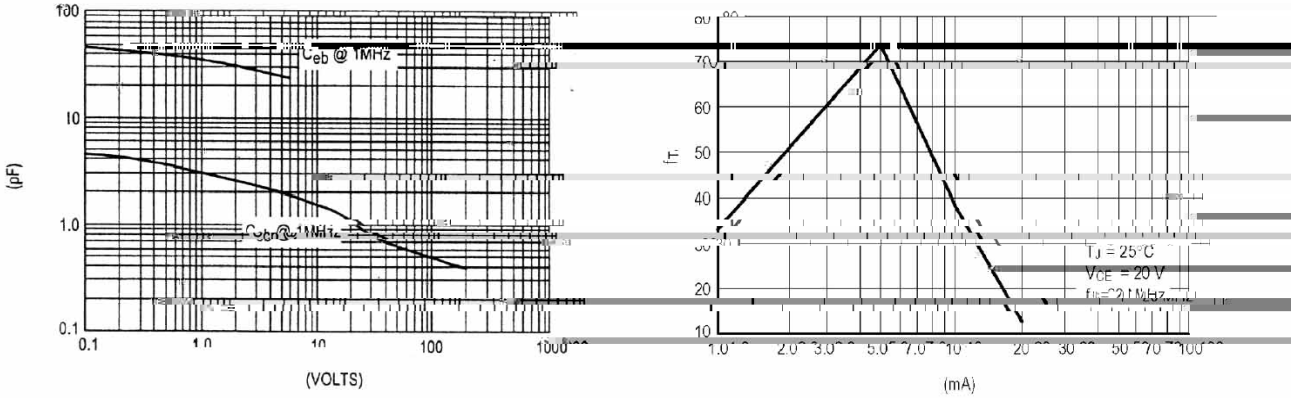
h_{FE} Range	>50
Marking	H1V

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	300	V
Collector to Emitter Voltage	V_{CEO}	300	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	50	mA
Peak Collector Current - Continuous	I_{CM}	100	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	250	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

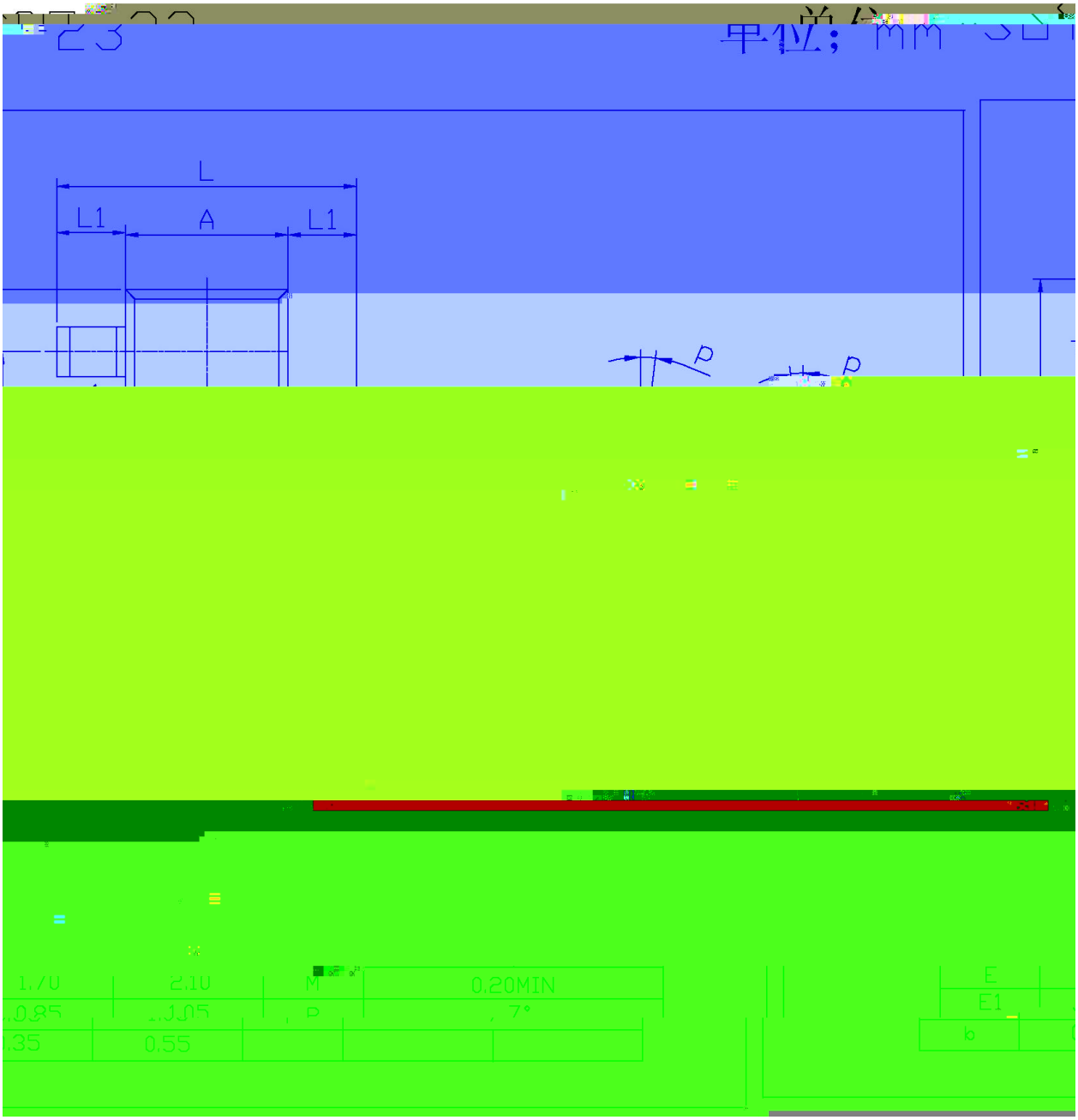
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=100μA I_E=0	300			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	300			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=100μA I_C				

/ Electrical Characteristic Curve

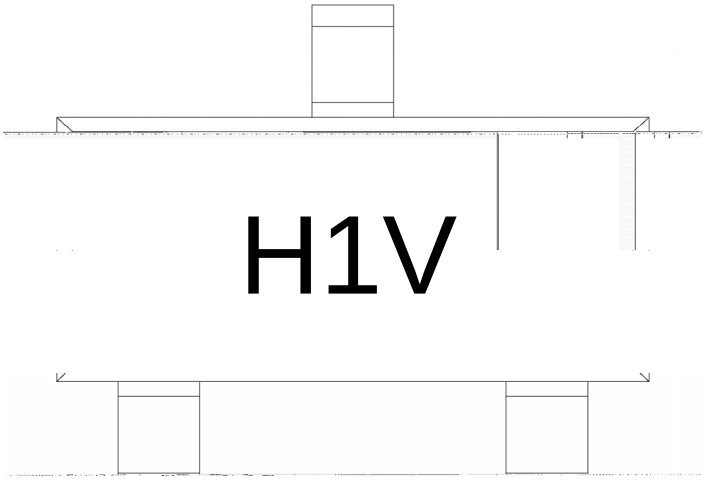




/ Package Dimensions



/ Marking Instructions



H

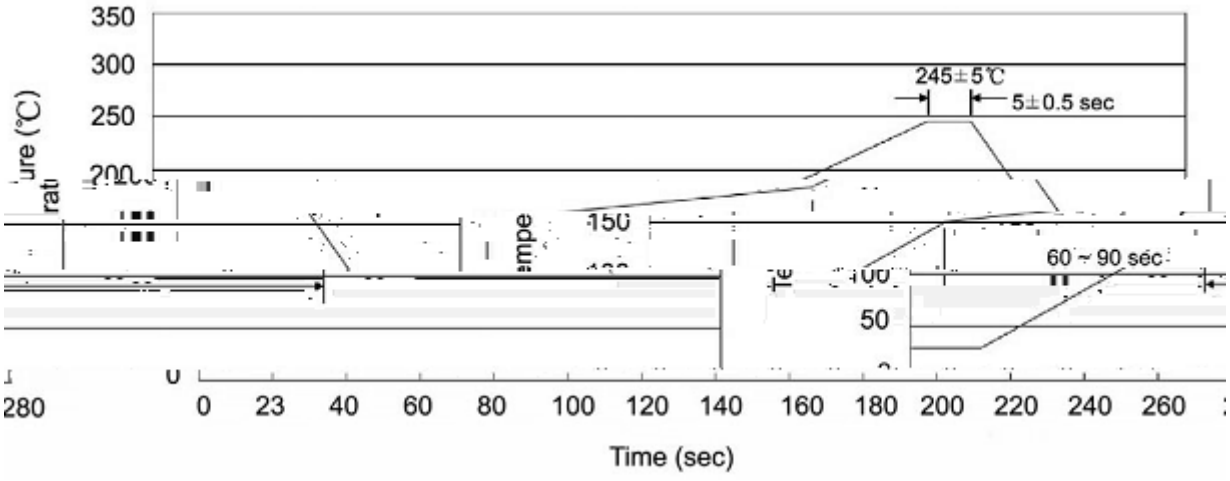
1V

Note:

H: Company Code.

1V: Product Type Code.

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



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.

Note:

/ 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