

/ Descriptions

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

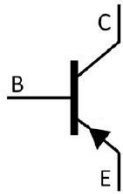
/ Features

Low current ,Low voltage ,S-mini package, HF Product.

/ Applications

General power amplifier application.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	A	B
h_{FE} Range	125 250	220 475
Marking	G3A	G3B

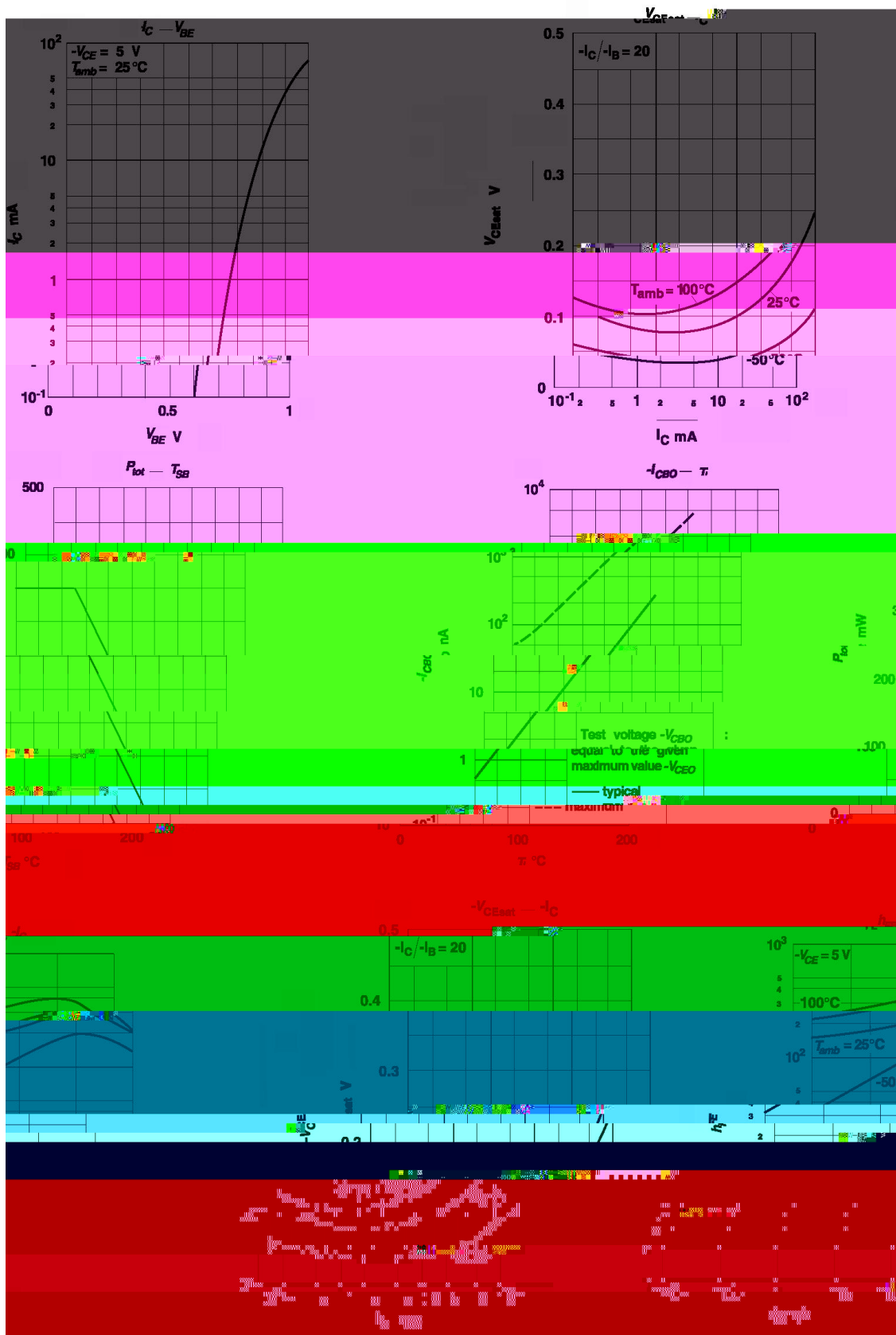
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-80	V
Collector to Emitter Voltage	V_{CEO}	-65	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30V$ $I_E=0$			-0.015	μA
DC Current Gain	h_{FE}	$V_{CE}=-5.0V$ $I_C=-2.0mA$	125		475	
Collector-Emitter Saturation Voltage	$V_{CE(sat) (1)}$	$I_C=-10mA$ $I_B=-0.5mA$		-0.09	-0.3	V
	$V_{CE(sat) (2)}$	$I_C=-100mA$ $I_B=-5.0mA$		-0.25	-0.65	V
Base-Emitter Saturation Voltage	$V_{BE(sat) (1)}$	$I_C=-10mA$ $I_B=-0.5mA$		-0.7		V
	$V_{BE(sat) (2)}$	$I_C=-100mA$ $I_B=-5.0mA$		-0.9		V
Base-Emitter Voltage	$V_{BE(ON)1}$	$V_{CE}=-5.0V$ $I_C=-2.0mA$	-0.6	-0.65	-0.75	V
	$V_{BE(ON)2}$	$V_{CE}=-5.0V$ $I_C=-10mA$			-0.82	V
Transition Frequency	f_T	$V_{CE}=-5.0V$ $I_E=10mA$ $f=100MHz$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$ $I_E=0$ $f=1MHz$		4.5		pF
Noise Figure	NF	$V_{CE}=-6.0V$ $I_C=-0.2mA$ $R_g=2K\Omega$ $f=1KHz$		2.0	10	dB

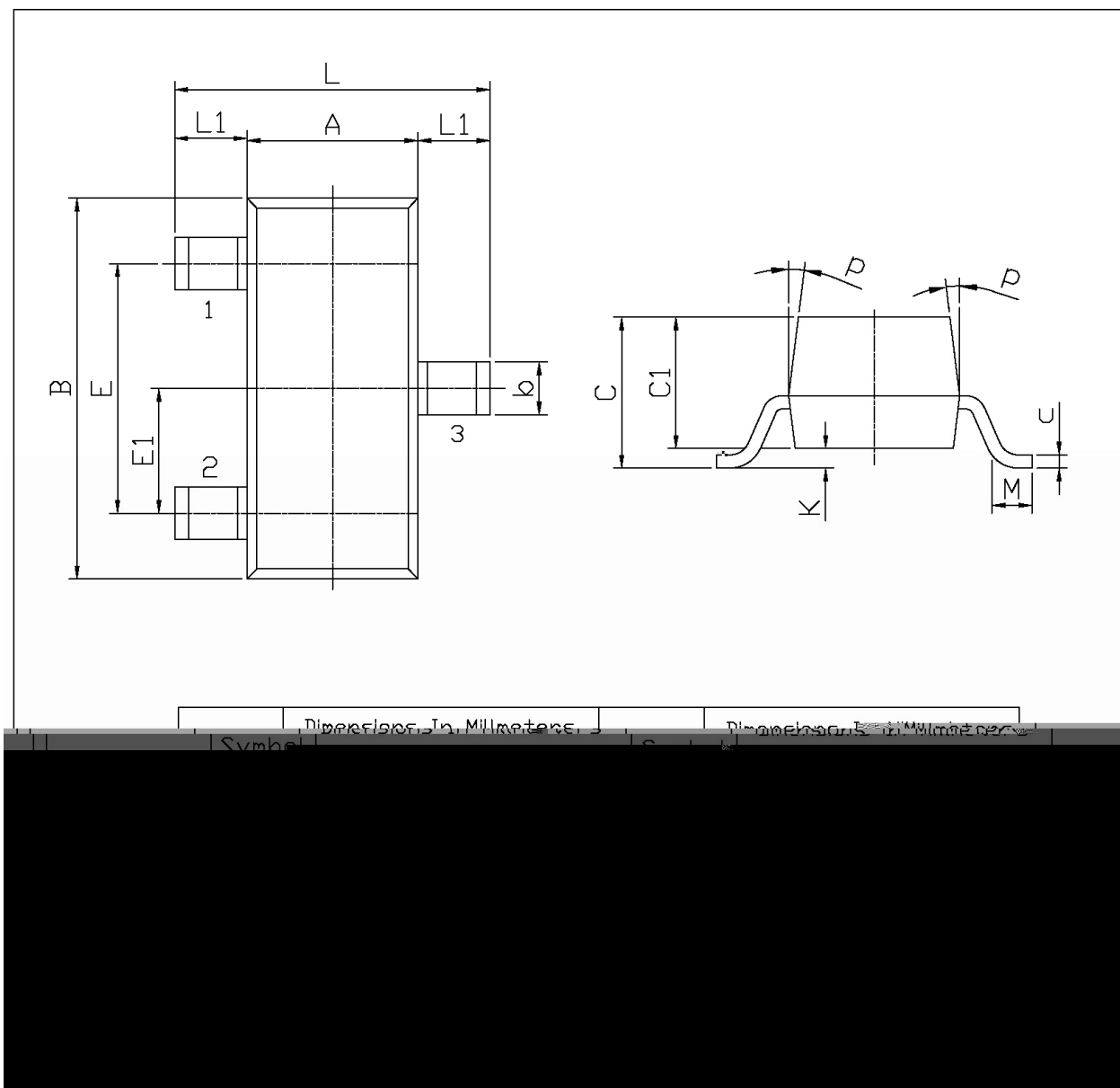
/ Electrical Characteristic Curve



/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



G

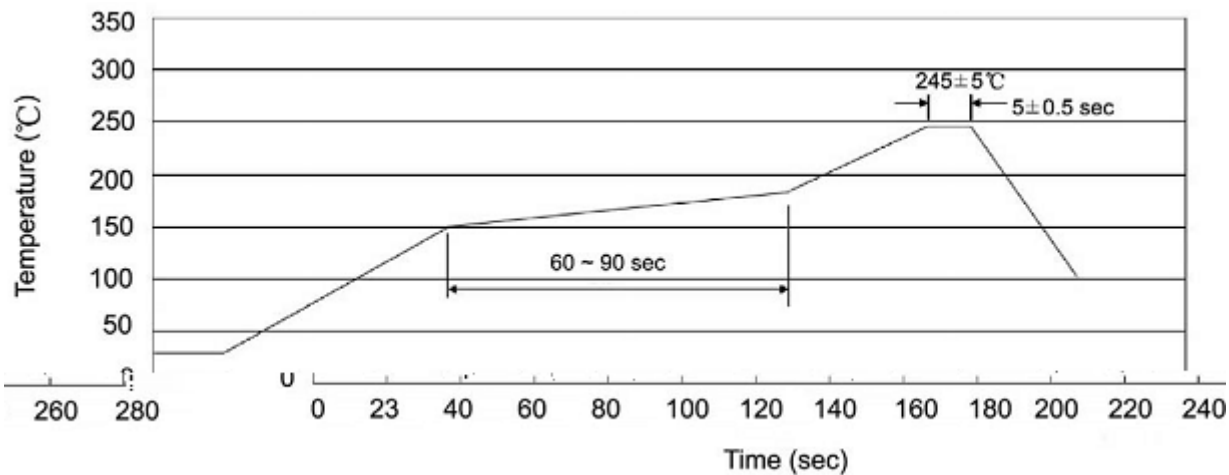
3A

Note:

G Halogen Free Product Code

3A 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. |

/ 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	8	180,000	7 ×8	180×120×180	390×385×205

/ Notices