/ Descriptions

Silicon NPN transistor in a SOT-23 Plastic Package.

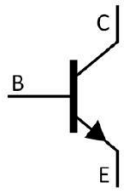
/ Features

High G_{pe}.

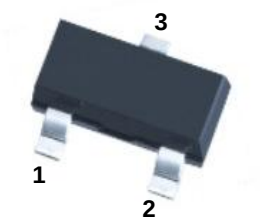
/ Applications

HF,VHF band amplifier application.

/ Equivalent Circuit



/ Pinning



PIN 1 Base PIN 2 Emitter PIN 3 Collector

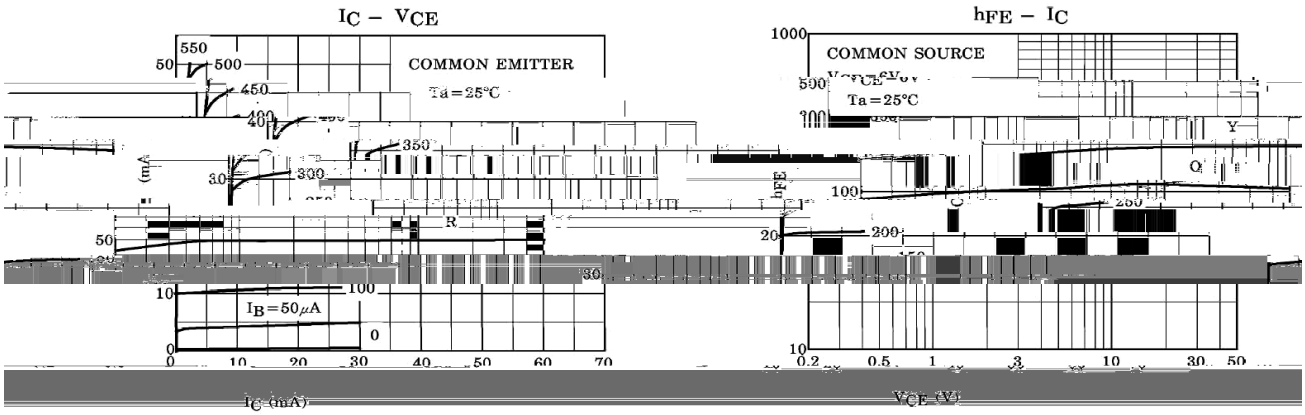
/ h_{FE} Classifications & Marking

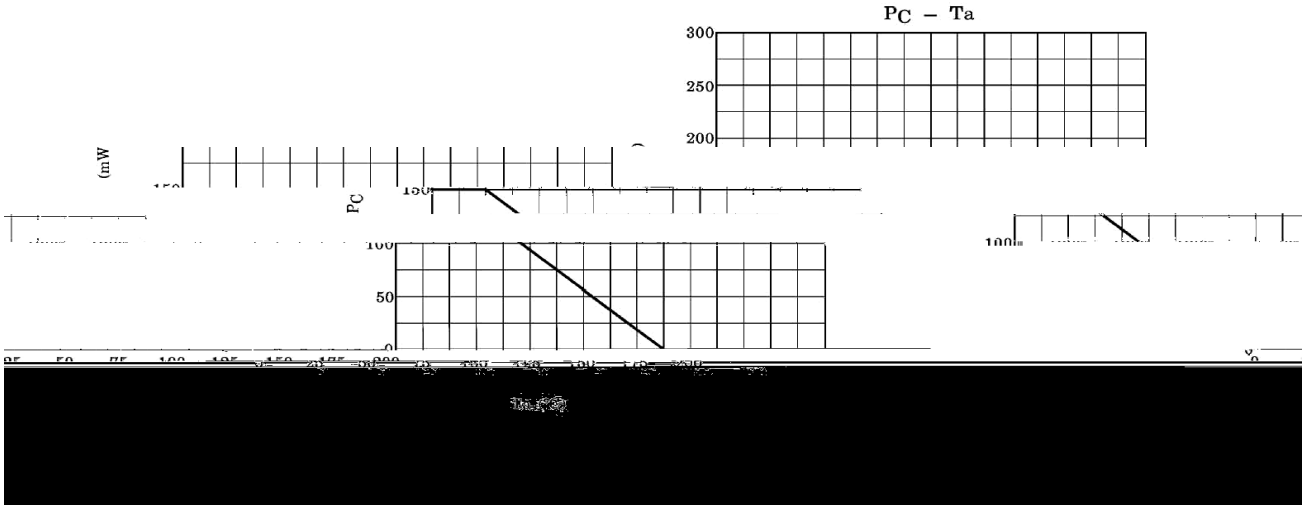
h_{FE} Classifications Symbol	R	O	Y
h_{FE} Range	40 80	70 140	120 240
Marking	HRR	HRO	HRY

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	50	mA
Collector Power Dissipation	P_C	150	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}=35V I_E=0			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=4.0V I_C=0			1.0	μA
DC Current Gain	h_{FE}	V_{CE}=12V I_C=2.0mA	40		240	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=10mA				

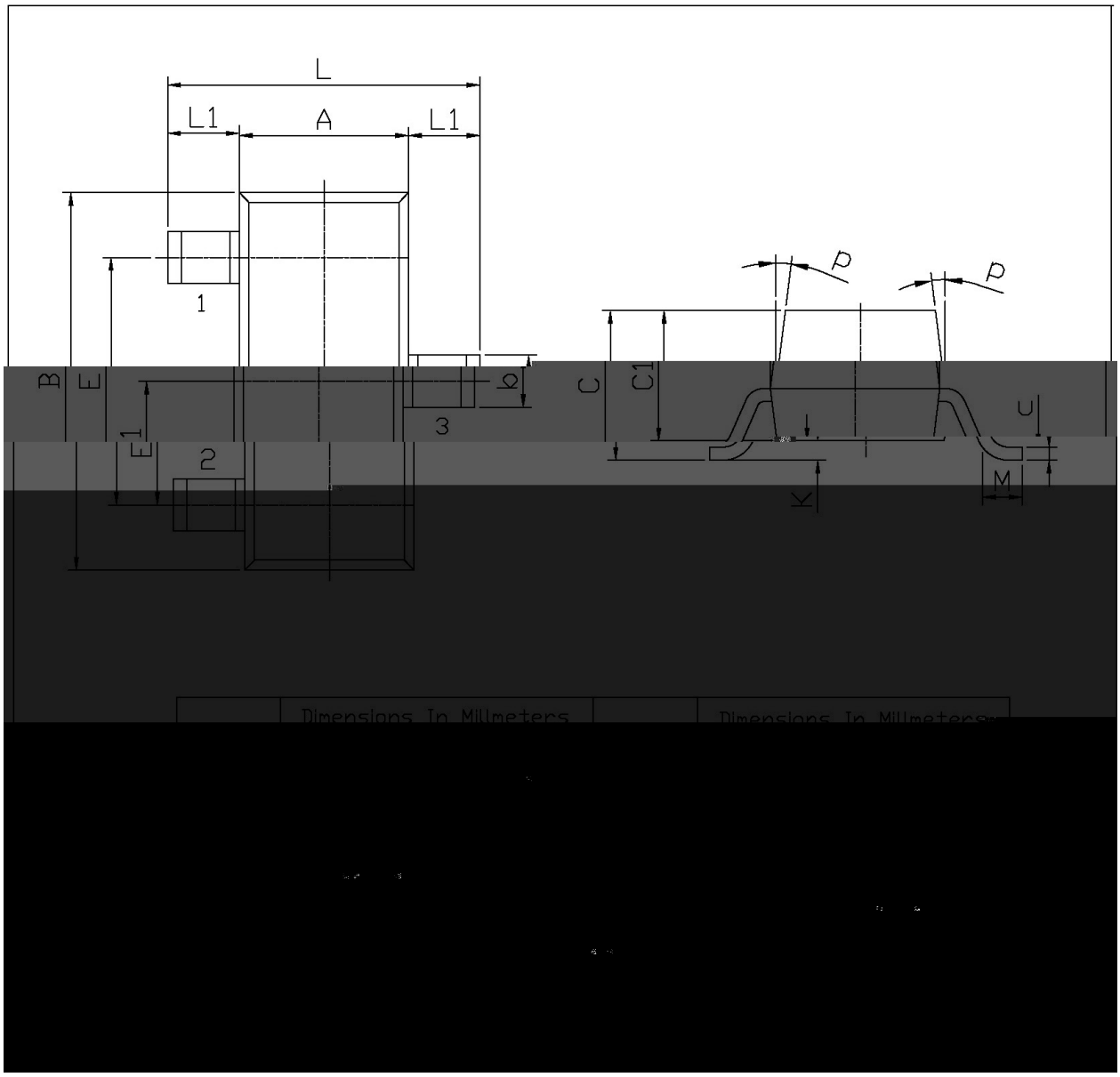
/ Electrical Characteristic Curve



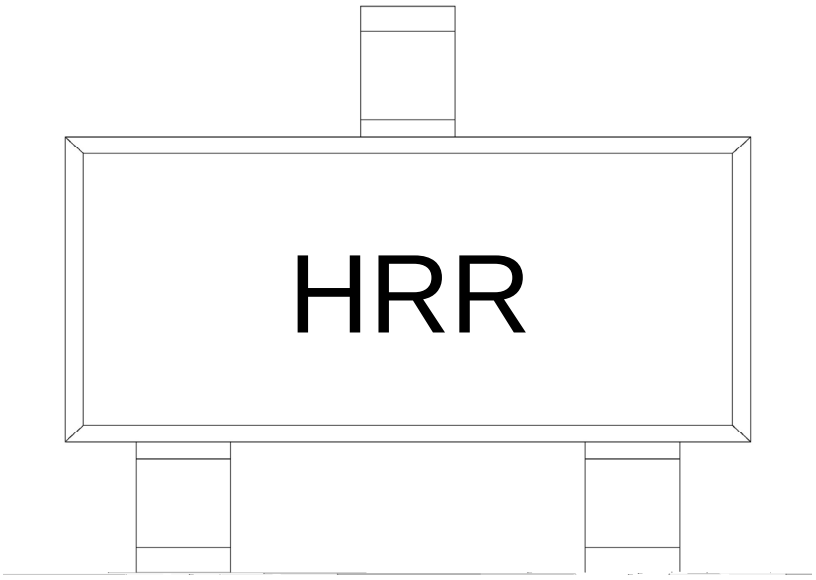


/ Package Dimensions

SOT-23 单位：mm



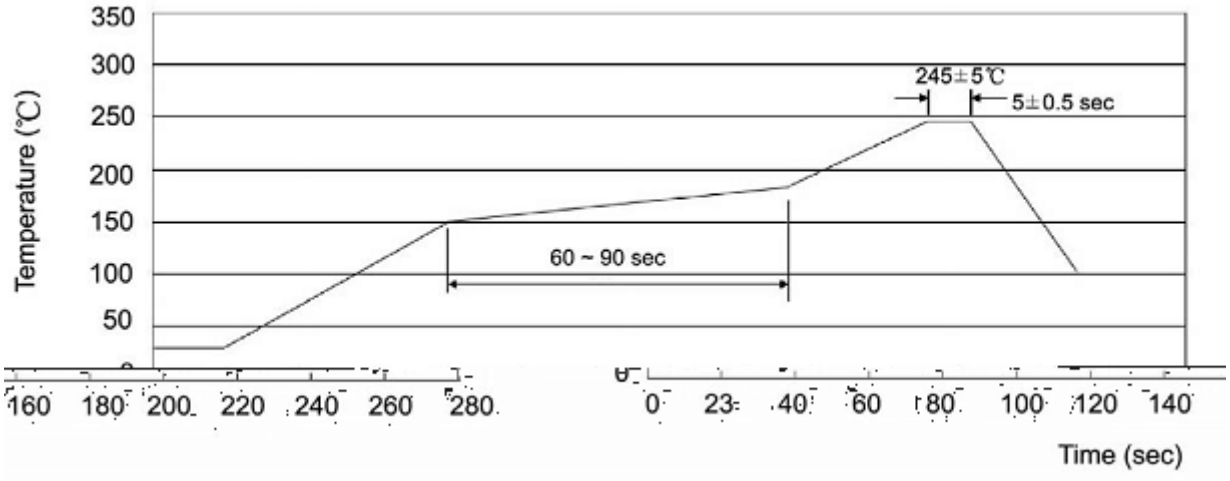
/ Marking Instructions



Note:

	Company Code
R	Product Type
	h_{FE} Classifications Symbol

( ) /



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