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

High power gain, recommended for FM IF,OSC stage and AM CONV.IF stage.

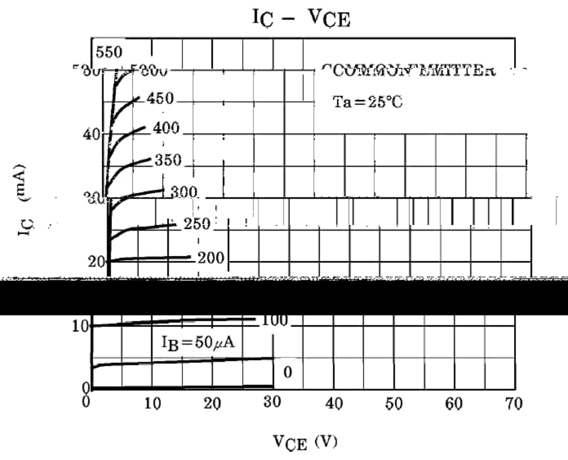
/ Absolute Maximum Ratings(Ta=25)

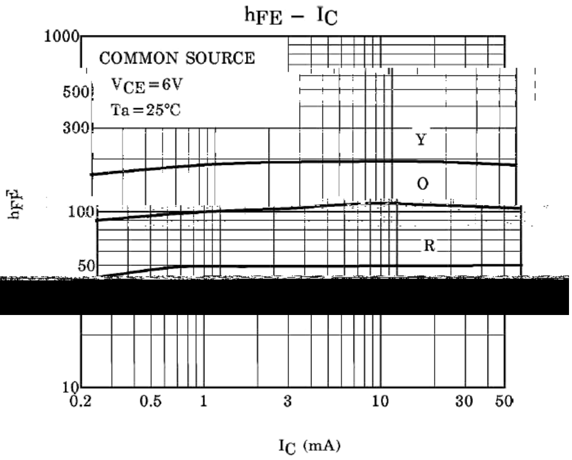
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	4.0	V
Collector Current	I_C	50	mA
Base Current	I_B	10	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55～150	℃

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=35V I_E=0			0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	V_{EB}=4.0V I_C=0			0.1	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 I_B=1.0mA			0.4	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=10mA I_B=1.0mA			1.0	V
Transition Frequency	f_T	V_{CE}=10V I_C=1.0mA	100		400	MHz
Reverse Transfer Capacitance (Common Emitter)	C_{ob}	V_{CE}=10V I_E=0 f=1.0MHz		2.0	3.2	pF
Conversion gain	G_{pe}	V_{CE}=6.0V I_E=-1.0mA f=10.7MHz	27	30	33	dB
Collector to Base Time Constant	C_c.rbb’	V_{CE}=10V I_E=-1.0mA f=30MHz			50	pS

/ Electrical Characteristic Curve





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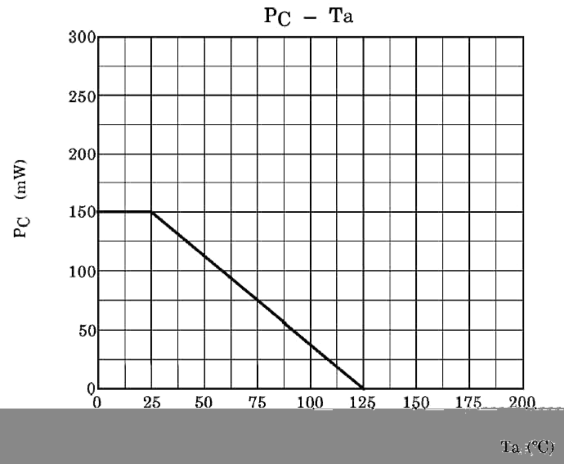
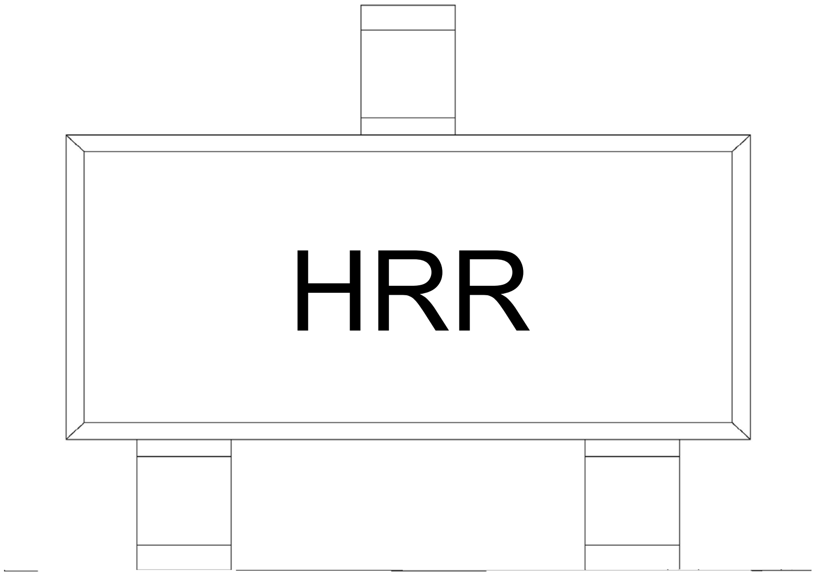


/ Marking Instructions



H

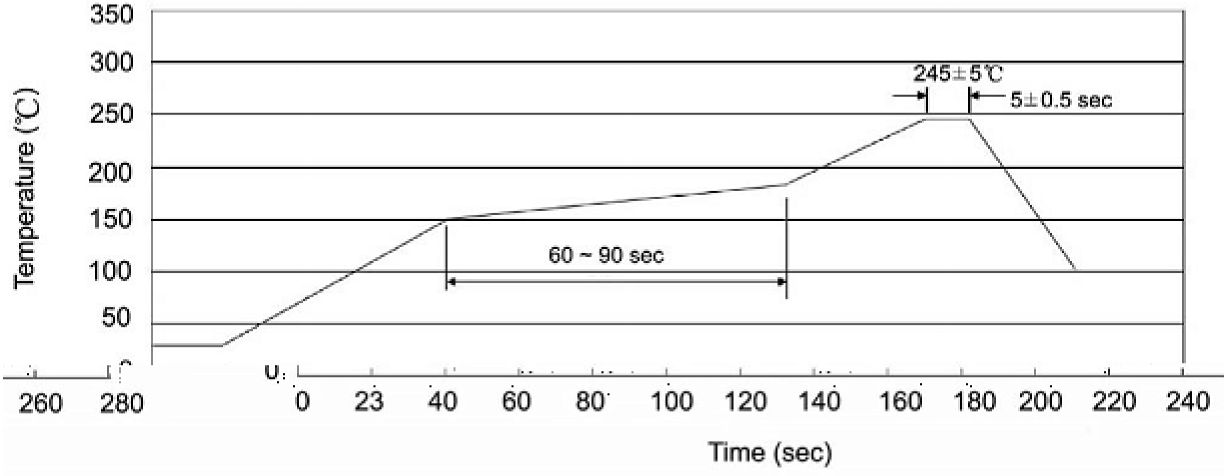
R

R hFE

Note:

H	Company Code
R	Product Type Code
R	h_{FE} Classifications Symbol Code

( ) /



	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)		
	只卷盘	卷盘盒	只盒	盒箱	只箱		盒	箱
						〃		

/ Notices