2SC3357

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

"Yـ / Descriptions

Silicon NPN transistor in a SOT-89 Plastic Package.

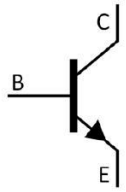
◕ È / Features

Low noise and high gain, large P_C in small package.

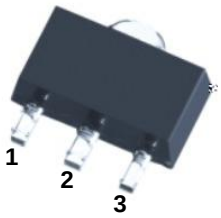
٧ ِ / Applications

low noise amplifier at VHF, UHF and CATV band applications.

Л ف ً ڤ ٪ ع / Equivalent Circuit



ã ﻝ ں ً / Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

ﻁ. ʜ ڈ / Marking

h_{FE} Classifications Symbol	H	F	E	G
h_{FE} Range	50 100	80 160	125 250	200 300
Marking	HRH **	HRF **	HRE **	HRG **

ώ ̈ Ξ ̃Ạ / Absolute Maximum Ratings(Ta=25 ɹ)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	20	V
Collector to Emitter Voltage	V_{CEO}	12	V
Emitter to Base Voltage	V_{EBO}	3.0	V
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	350	mW
Collector Power Dissipation	$*P_C$	1.2	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*:mounted on 16cm^2×7mm ceramic substrate.

*:

≠ ∧ Ξ ̃Ạ / Electrical Characteristics(Ta=25 ɹ)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=10V I_E=0			1.0	A
Emitter Base Cut-Off Current	I_{EBO}	V_{EB}=1.0V I_C=0			1.0	A
DC Current Gain	h_{FE}	V_{CE}=10V I_C=20mA	50	120	300	
Transition Frequency	f_T	V_{CE}=10V I_C=20mA		6.5		GHz
Feed-Back Capacitance	C_{re}	V_{CB}=10V I_E=0 f=1.0MHz		0.65	1.0	pF
Noise Figure	$NF_{(1)}$	V_{CE}=10V I_C=7.0mA f=1.0GHz		1.1		dB
	$NF_{(2)}$	V_{CE}=10V I_C=40mA f=1.0GHz		1.8	3.0	dB

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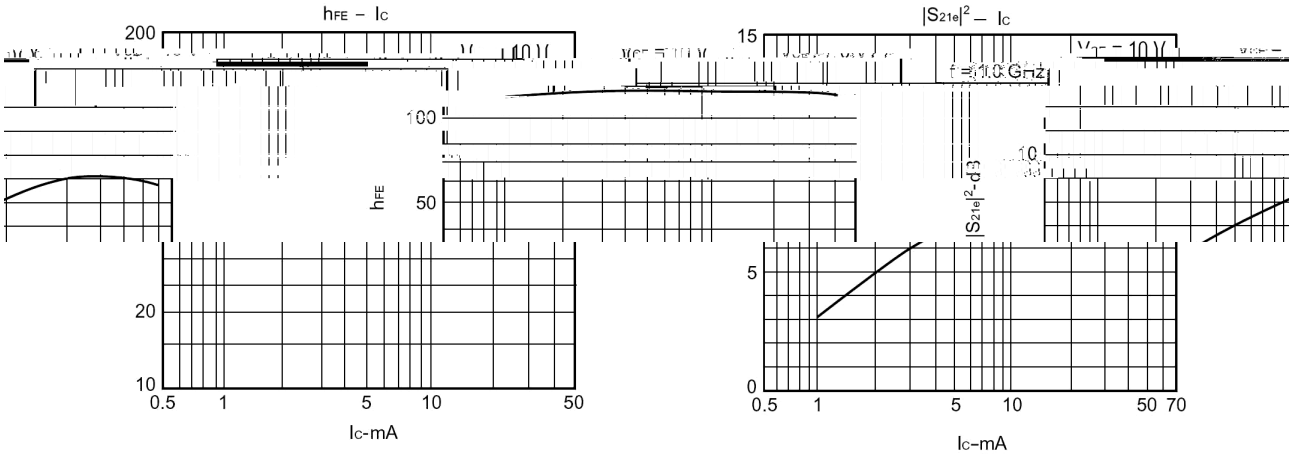
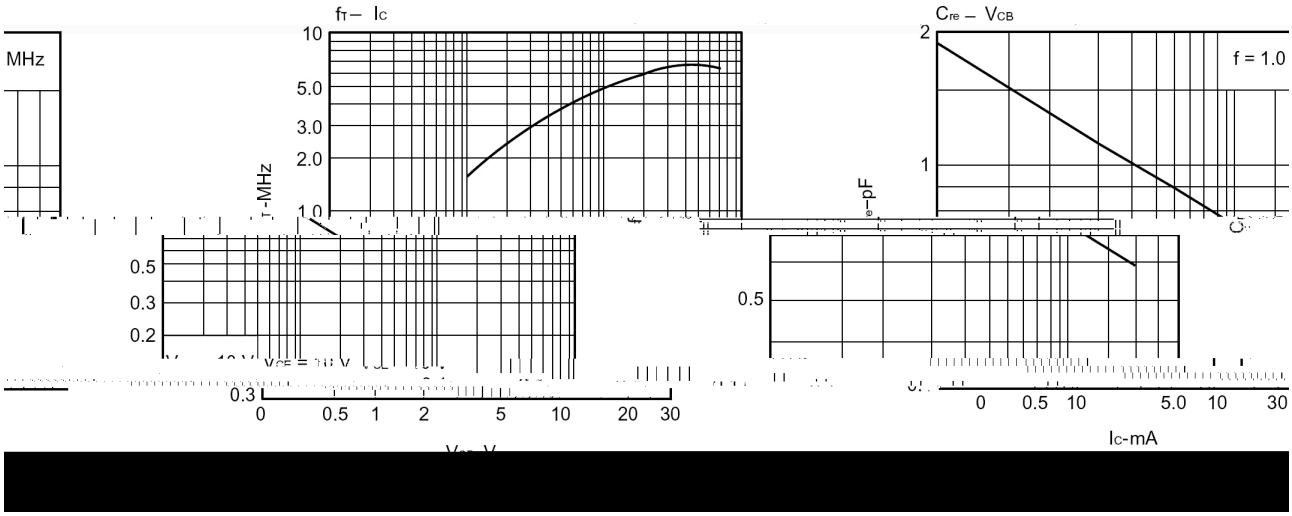
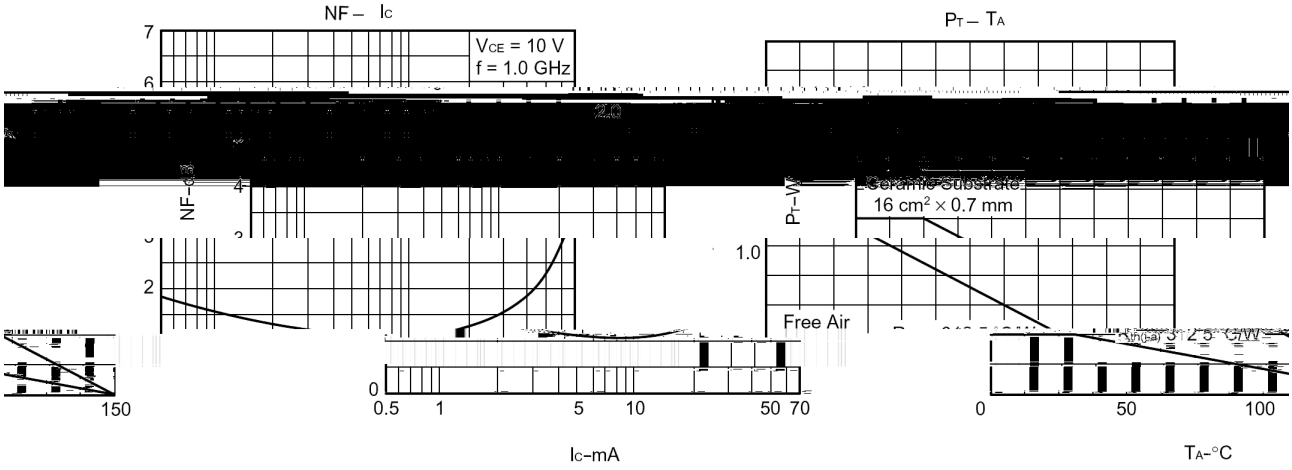
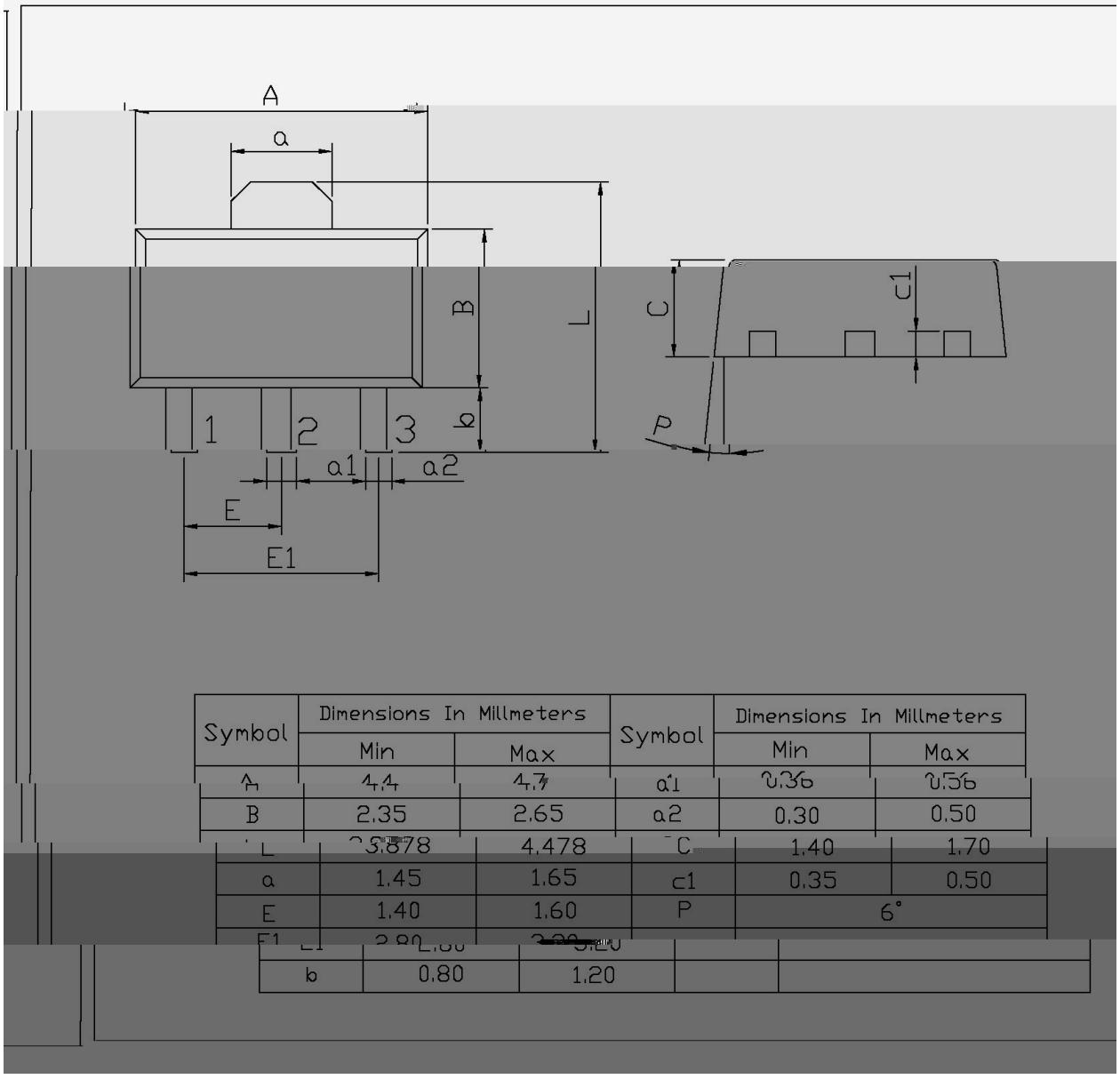






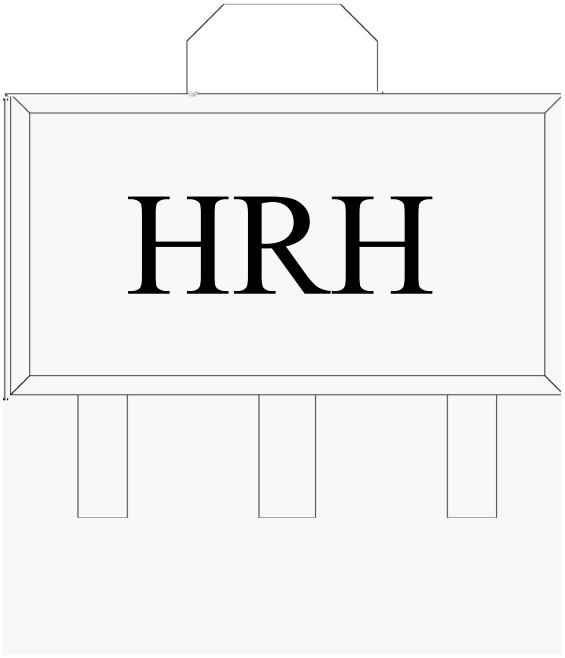
ᵘ ĖÒĻ ƒ / Package Dimensions

SOT-89 单位：mm



Symbol	Dimensions In Millmeters		Symbol	Dimensions In Millmeters	
	Min	Max		Min	Max
A	4.4	4.7	a1	0.36	0.56
B	2.35	2.65	a2	0.30	0.50
L	3.878	4.478	C	1.40	1.70
a	1.45	1.65	c1	0.35	0.50
E	1.40	1.60	P	6°	
E1	2.90	3.20			
b	0.80	1.20			

Ł. Ł'Ω / Marking Instructions



H

R

H

Note:

H: Company Code.

R: Product Type.

H h_{FE} Classifications Symbol

**: Lot No. Code, code change with Lot No.

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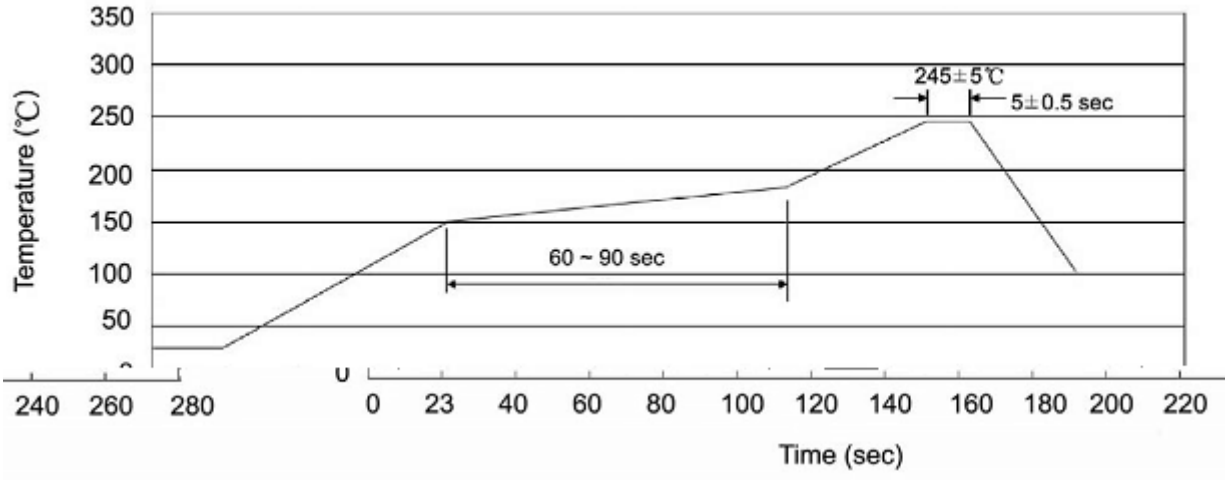

Note:

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.

⅃ ü ɋ ‾ `Y Ţ / Resistance to Soldering Heat Test Conditions

260 5	10 1 sec.	Temp.:260±5	Time:10±1 sec	

ɒ Ŀ ≮ — / 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-89	1,000	7	7,000	8	56,000	7 ×12	180×120×180	385×257×392

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