2SA1213

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

"Yـ / Descriptions

SOT-89 PNP Silicon PNP transistor in a SOT-89 Plastic Package.

◕ È / Features

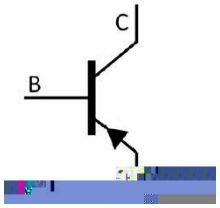
, 2SC2873

Low collector saturation voltage, High speed switching time, small flat package, Complementary to 2SC2873.

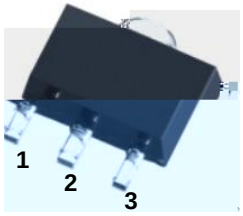
¥ ٍ / Applications

Power amplifier and switching applications.

Л ف ٌ ٔ ≠ ع / Equivalent Circuit



ã ﻝ ٍ / Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

ł. ʜ ↄ / Marking

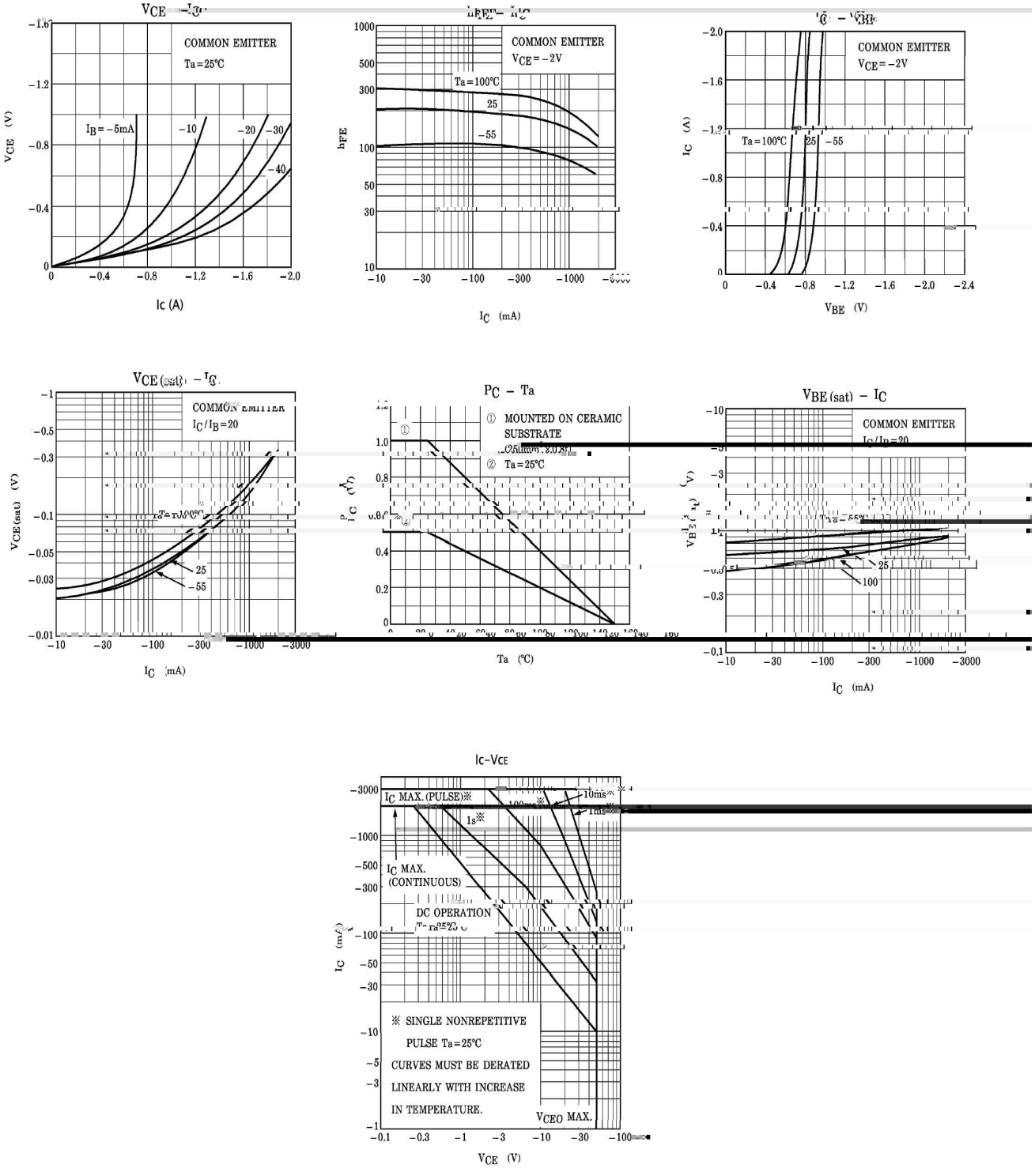
h_{FE} Classifications Symbol	O	Y
h_{FE} Range	70 140	120 240
Marking	HNO ⁑	HNY ⁑

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current-Continuous	I_C	-2.0	A
Collector Base-Continuous	I_B	-0.4	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	*P_C(Ta=25)	1000	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*BR2SA1213 mounted on ceramic substrate(250mm^2×0.8t).

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=-50V I_E=0			-0.1	μA
Emitter Base Cut-Off Current	I_{EBO}	V_{EB}=-5.0V I_C=0			-0.1	μA
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-10mA I_B=0	-50			V
DC Current Gain	$h_{FE(1)}$	V_{CE}=-2.0V I_C=-500mA	70		240	
	$h_{FE(2)}$	V_{CE}=-2.0V I_C=-2.0A	20			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-1.0A I_B=-0.05A			-0.5	V
Collector to Base Saturation Voltage	$V_{BE(sat)}$	I_C=-1.0A I_B=-0.05A			-1.2	V
Transition Frequency	f_T	V_{CE}=-2.0V I_C=-500mA		120		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1MHz		40		pF
Turu-On Time	t_{on}	$-I_{B1}=I_{B2}$=0.05A V_{CC}=-30V		0.1		μS
Storage Time	t_{stg}			1.0		
Fall Time	t_f			0.1		

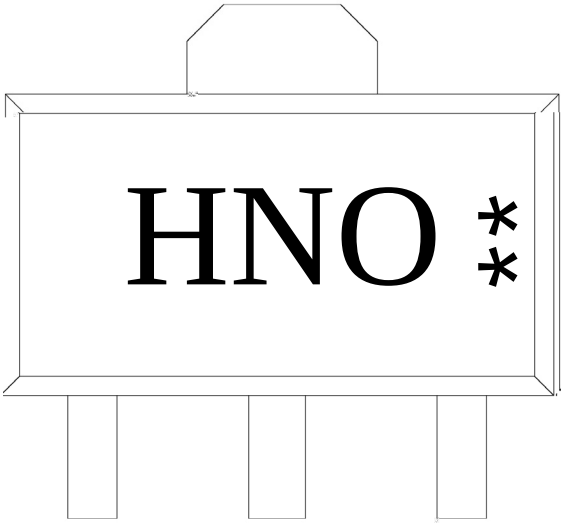
≠ Ǝ ⁷Ą´E ᛋ ƒ / Electrical Characteristic Curve



ᵘ ĖÒĻ ʃ / Package Dimensions



Ł. Ł'Ω / Marking Instructions



H

N

O h_{FE}

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Note:

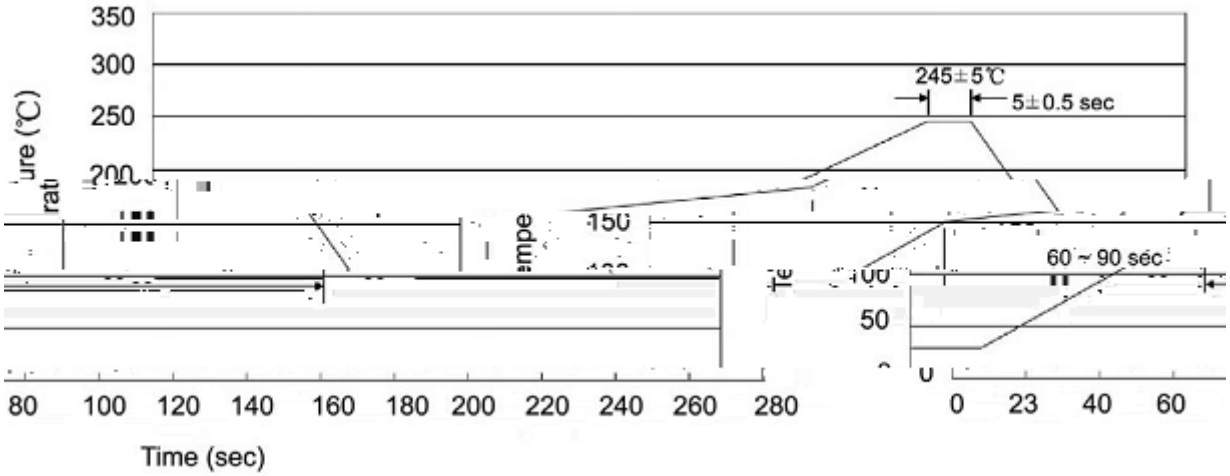
H: Company Code.

N: Product Type.

O: 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.

ⅎ ü q ‗ `Y Ţ / Resistance to Soldering Heat Test Conditions

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

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/ REEL

Package Type	Units	Dimens-6.4cf40968}FJ2	T