

/ Descriptions

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

/ Features

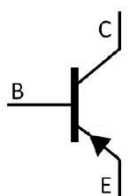
2SC2873

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

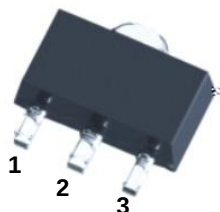
/ Applications

Power amplifier and switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ Marking

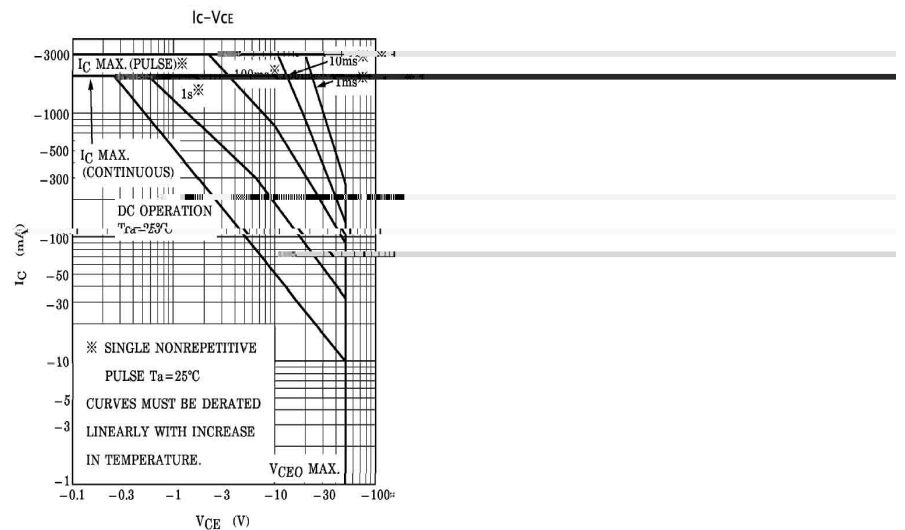
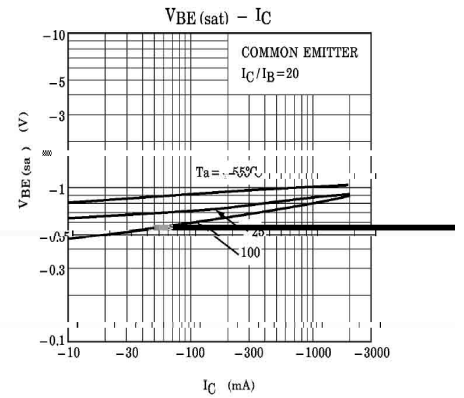
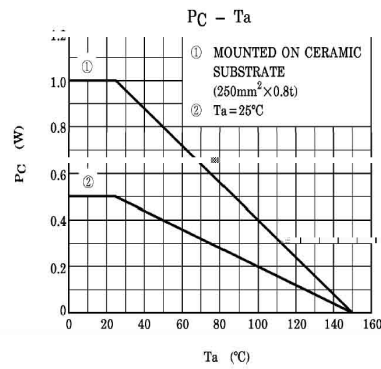
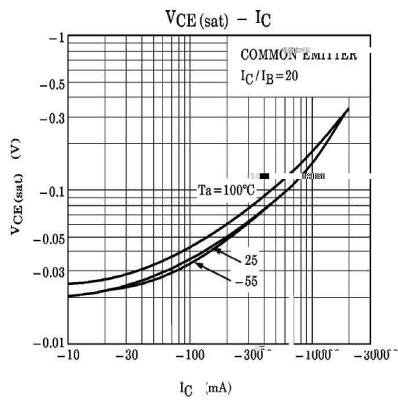
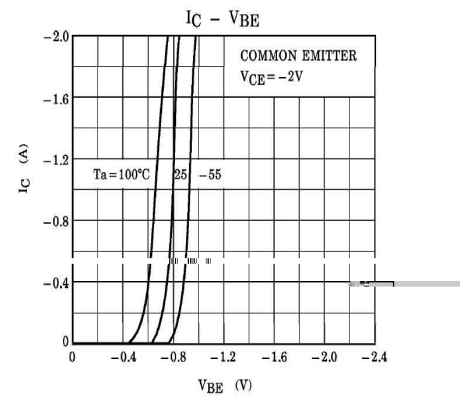
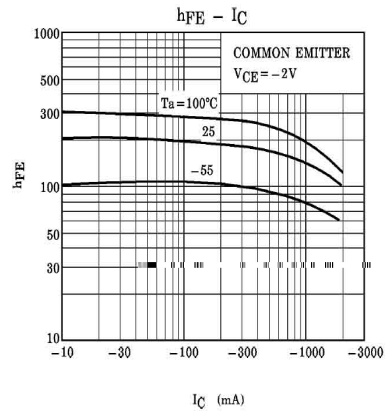
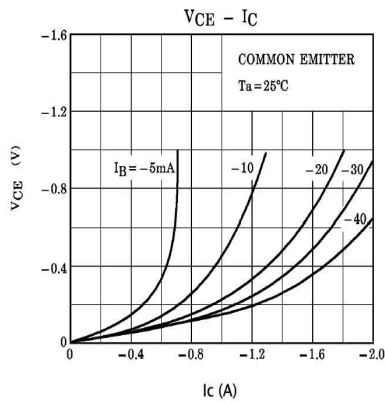
h_{FE} Classifications Symbol	O	Y
h_{FE} Range	70~140	120~240
Marking	HNO *	HNY *

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*	$*P_C(T_a=25^\circ\text{C})$	1000	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

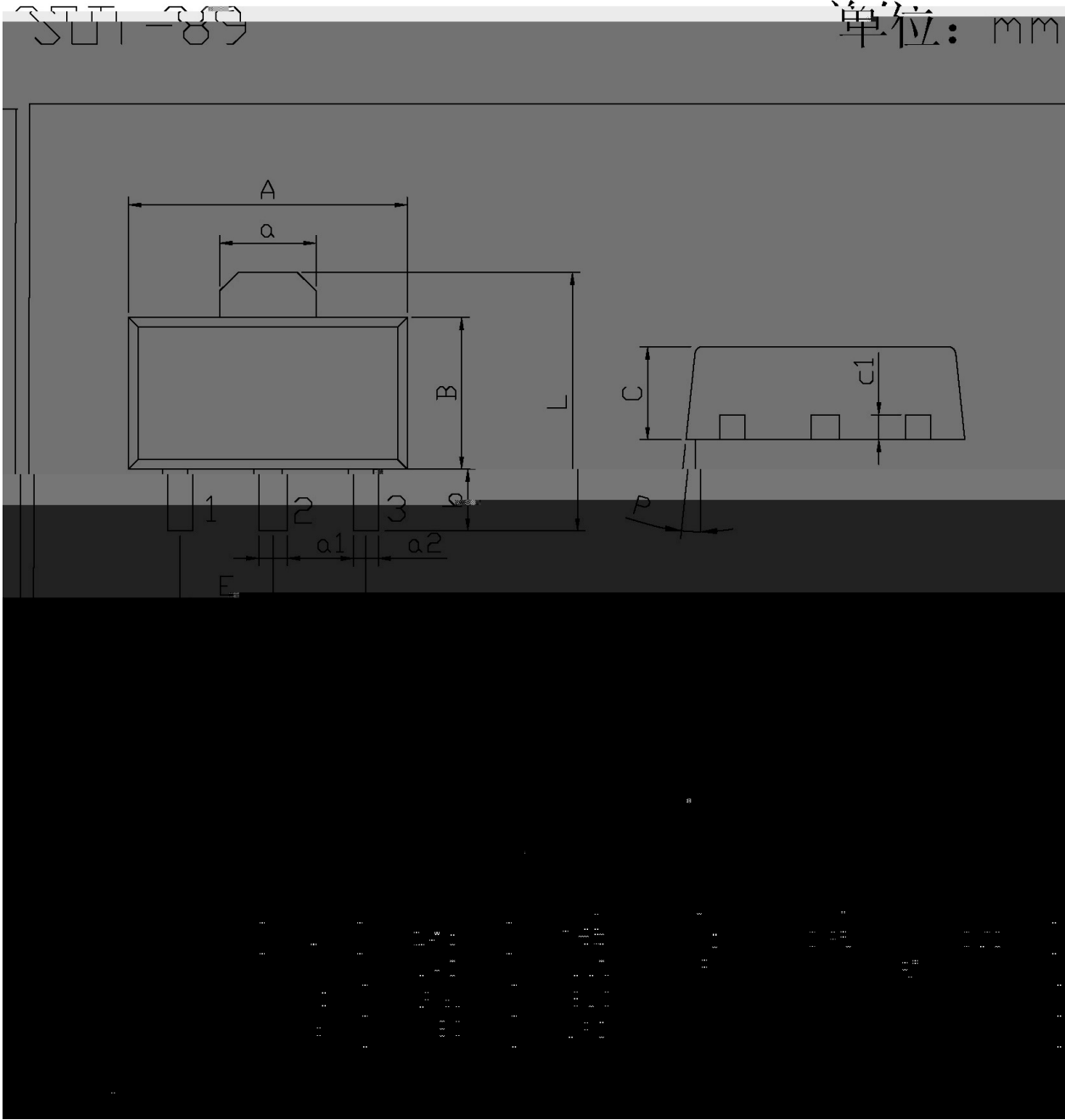
*BR2SA1213 mounted on ceramic substrate(250mm²×0.8t).

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
Turn-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		

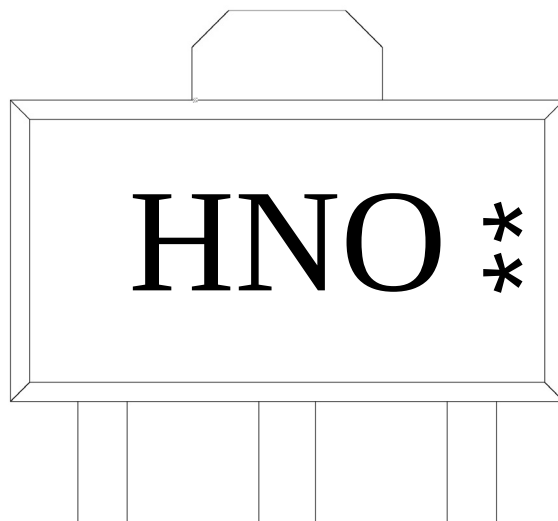
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

N

O

h_{FE}

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Note:

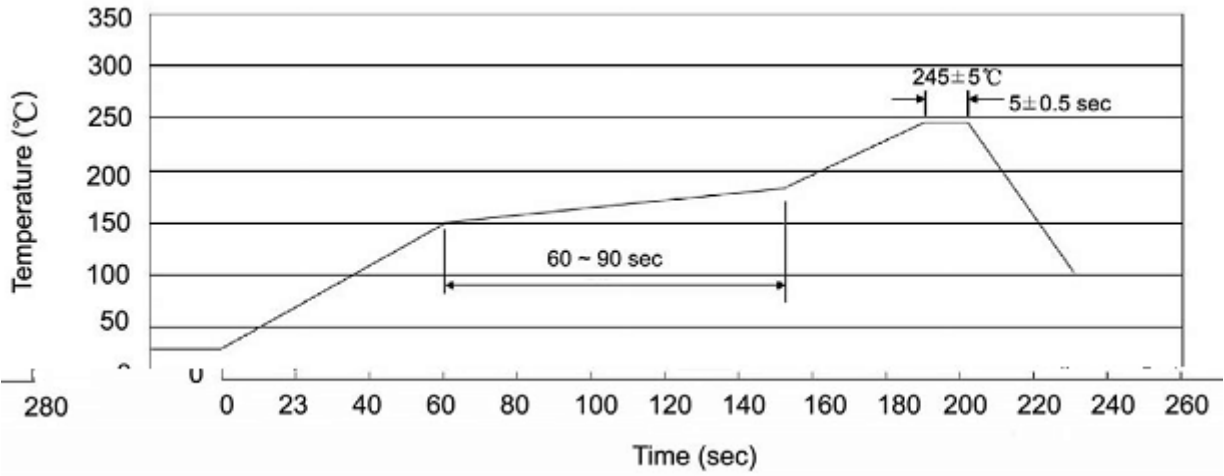
H: Company Code.

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. |

/ Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec
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/ Packaging SPEC.

/ REEL

Package Type	Units	Dimens4003	Tm.-6.4363
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