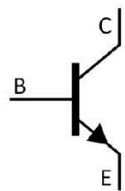


Silicon NPN transistor in a SOT-323 Plastic Package.

High f_T , small $C_{C.rbb'}$ and high gain, small NF.

High-Frequency amplifier transistor

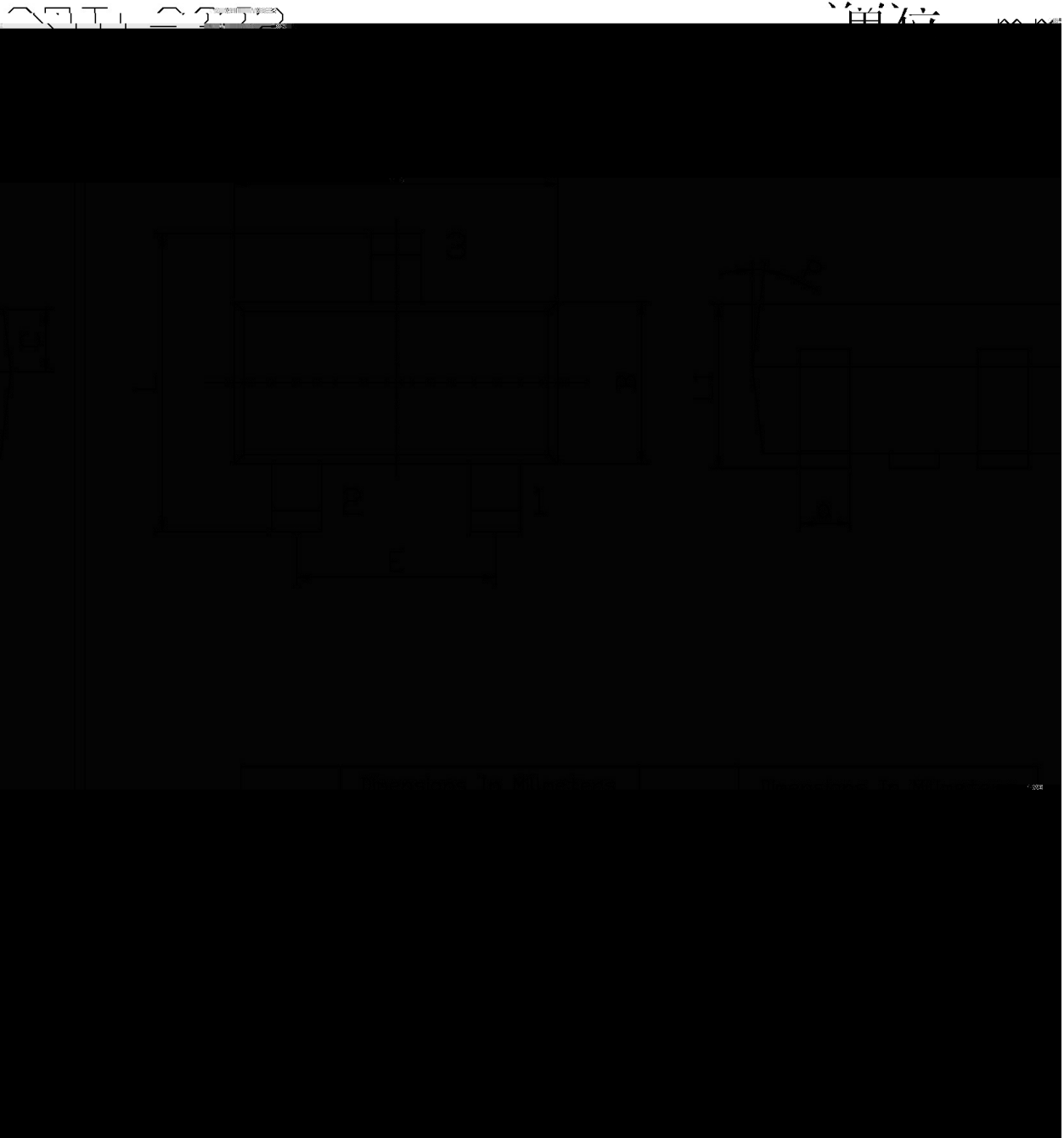


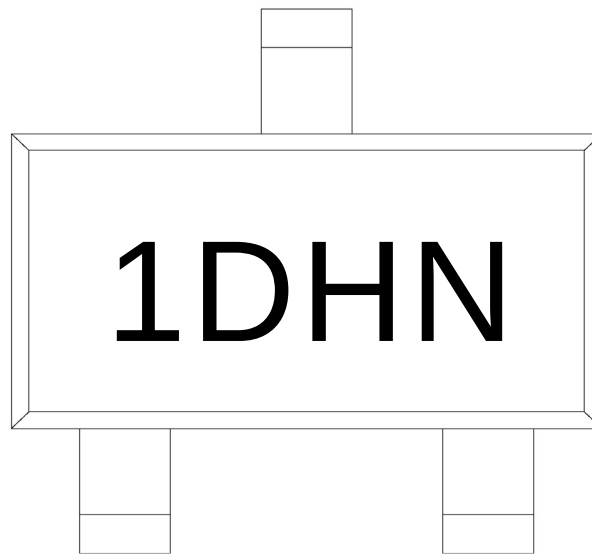
PIN1 Emitter PIN 2 Base PIN 3 Collector

h_{FE} Classifications	N	P
Symbol		
h_{FE} Range	56 120	82 180
Marking	1DHN	1DHP

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	20	V
Collector to Emitter Voltage	V_{CEO}	11	V
Emitter to Base Voltage	V_{EBO}	3.0	V
Collector Current - Continuous	I_C	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\mu A$ $I_E=0$	20			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $I_B=0$	11			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\mu A$ $I_C=0$	3.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=10V$ $I_E=0$			0.5	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=2.0V$ $I_C=0$			0.5	μA
DC Current Gain	h_{FE}	$V_{CE}=10V$ $I_C=5.0mA$	56		180	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA$ $I_B=5.0mA$			0.5	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_E=10mA$ $f=500MHz$	1.4	3.2		GHz
Output Capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0mA$ $f=1.0MHz$		0.8	1.5	pF
Collector-Base Time Constant	$C_{C.rbb}$	$V_{CB}=10V$ $I_C=10mA$ $f=31.8MHz$		4.0	12	pS
Noise Factor	NF	$V_{CE}=6V$ $I_C=2mA$ $f=500MHz$ $R_g=50\Omega$		3.5		dB





1D

H

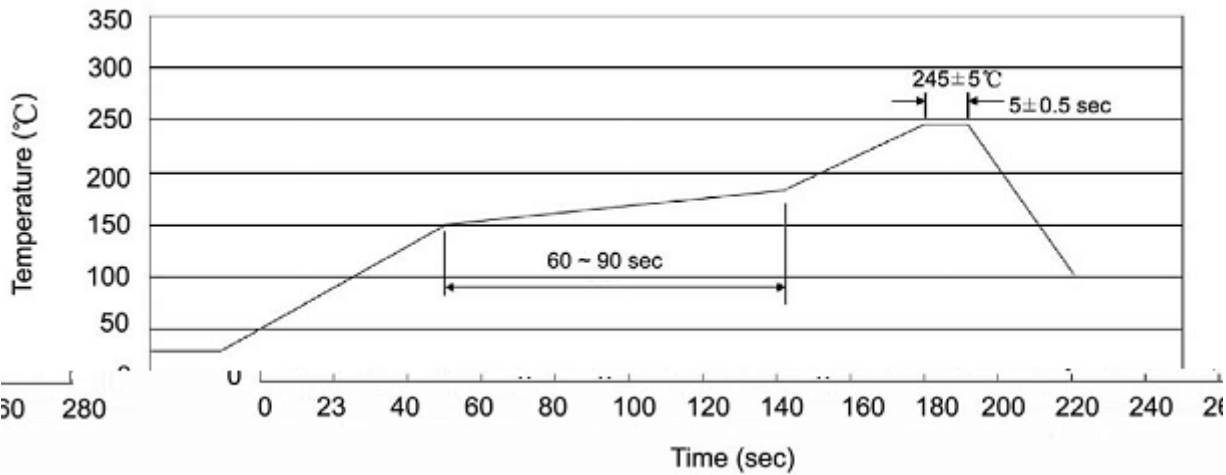
N h_{FE}

Note:

1D: Product Type.

H: Company Code.

N: 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.

260 5

10 1 sec.

Temp.:260±5

Time:10±1 sec

/ 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-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205