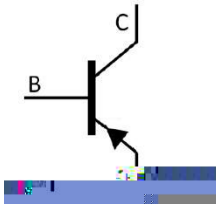
Silicon PNP transistor in a SOT-323 Plastic Package.

Medium power amplifier and switch requiring collector currents up to 500 mA.

Medium power amplifier and switch requiring.



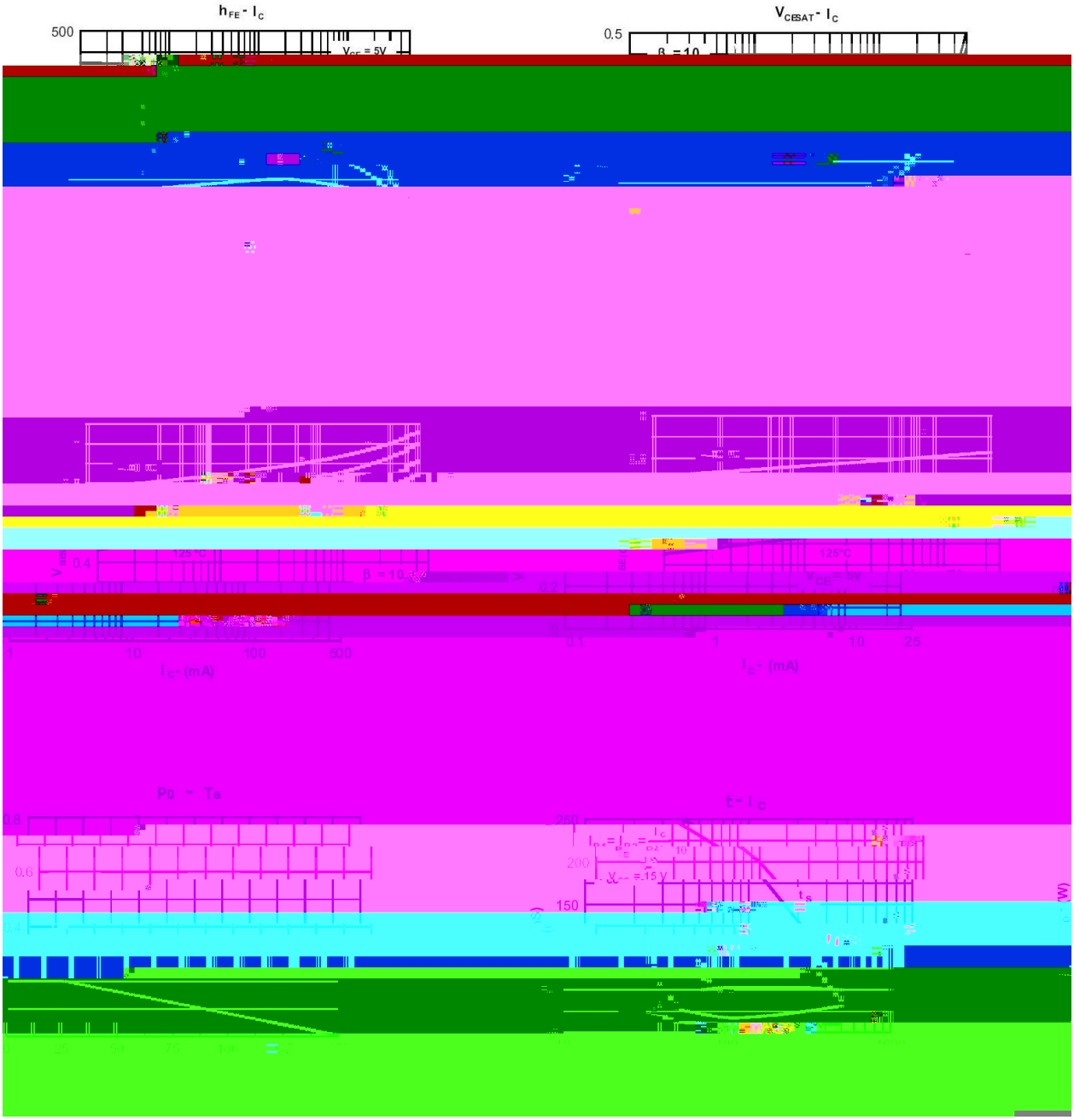


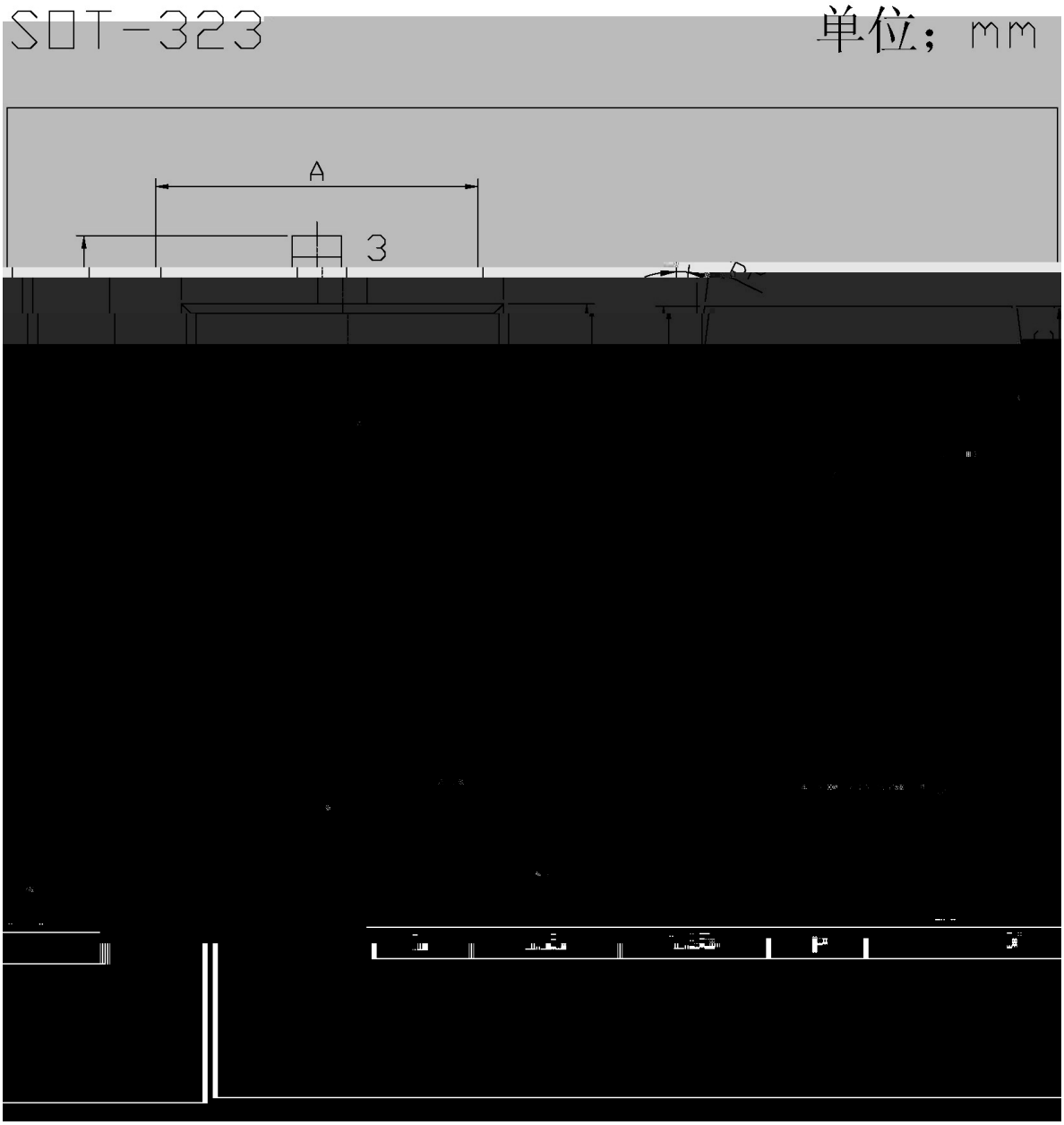

PIN1 Emitter PIN 2 Base PIN 3 Collector

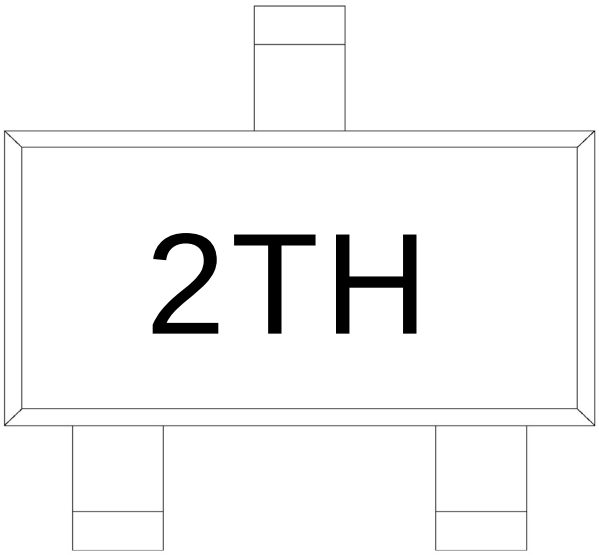
| | |
|---|---|
| Marking | 2TH |

| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Collector to Base Voltage | $V_{CBO}$ | -40 | V |
| Collector to Emitter Voltage | $V_{CEO}$ | -40 | V |
| Emitter to Base Voltage | $V_{EBO}$ | -5.0 | V |
| Collector Current - Continuous | $I_C$ | -600 | 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 Emitter Breakdown Voltage | $V_{CEO}$ | $I_C$=-1.0mA $I_B$=0 | -40 | | | V |
| Collector to Base Breakdown Voltage | $V_{CBO}$ | $I_C$=-0.1mA $I_E$=0 | -40 | | | V |
| Emitter to Base Breakdown Voltage | $V_{EBO}$ | $I_E$=-0.1mA $I_C$=0 | -5.0 | | | V |
| Collector Cut-Off Current | $I_{CBO}$ | $V_{CB}$=-40V $I_E$=0 | | | -50 | nA |
| Emitter to Base Current | $I_{EBO}$ | $V_{EB}$=-5V $I_C$=0 | | | -50 | nA |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE}$=-2.0V $I_C$=-150mA | 100 | | 300 | |
| | $h_{FE(2)}$ | $V_{CE}$=-1.0V $I_C$=-0.1mA | 30 | | | |
| | $h_{FE(3)}$ | $V_{CE}$=-1.0V $I_C$=-1.0mA | 60 | | | |
| | $h_{FE(4)}$ | $V_{CE}$=-1.0V $I_C$=-10mA | 100 | | | |
| | $h_{FE(5)}$ | $V_{CE}$=-2.0V $I_C$=-500mA | 20 | | | |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)\ (1)}$ | $I_C$=-150mA $I_B$=-15mA | | | -0.4 | V |
| | $V_{CE(sat)\ (2)}$ | $I_C$=-500mA $I_B$=-50mA | | | -0.75 | V |
| Base to Emitter Saturation Voltage | $V_{BE(sat)\ (1)}$ | $I_C$=-150mA $I_B$=-15mA | -0.75 | | -0.95 | V |
| | $V_{BE(sat)\ (2)}$ | $I_C$=-500mA $I_B$=-50mA | | | -1.3 | V |
| Transition Frequency | $f_T$ | $V_{CE}$=-10V $I_C$=-20mA f=100MHz | 200 | | | MHz |
| Delay Time | $t_d$ | $V_{CC}$=-30V $I_C$=-150mA $I_{B1}$=-15mA | | | 15 | ns |
| Rise Time | $t_r$ | | | | 20 | ns |
| Storage Time | $t_s$ | $V_{CC}$=-30V $I_C$=-150mA $I_{B1}$=$I_{B2}$=-15mA | | | 225 | ns |
| Fall Time | $t_f$ | | | | 30 | ns |


h_FE - I_C
500
V_CE = 5V
V_CESAT - I_C
0.5
β =10
125°C
β =10
125°C
V_CE= 5V
0.4
0.2
1
10
100
500
0.1
1
10
25
I_C - (mA)
I_C - (mA)
Pd - Ta
t - I_C
0.8
0.6
250
200
150
-15V


SOT-323
单位：mm
A
3



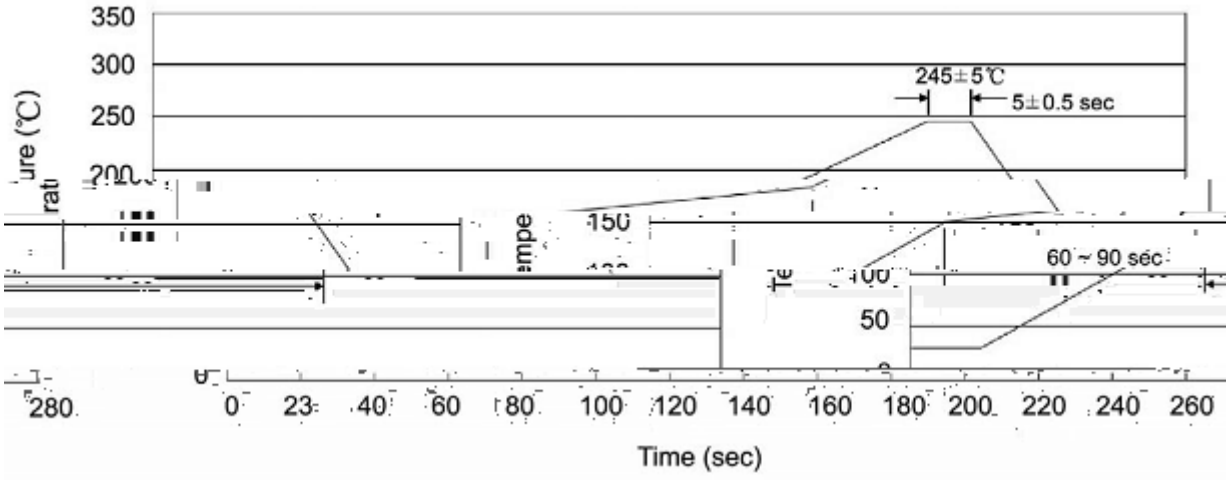

2T

H

Note:

2T: Product Type.

H: Company 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.

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

/ REEL

| Package Type | Units | | | | | Dimension | | (unit mm$^3$) |
|---|---|---|---|---|---|---|---|---|
| | Units/Reel / | Reels/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Reel | Inner Box | Outer Box |
| SOT-323 | 3,000 | 10 | 30,000 | 6 | 180,000 | 7 ×8 | 180×120×180 | 390×385×205 |

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