

/ Descriptions

SOT-323 NPN Silicon NPN transistor in a SOT-323 Plastic Package.

/ Features

Low C_{ob} .

/ Applications

General amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Base PIN 3 Collector

/ Marking

| | | | |
|--------------------------|---------|---------|---------|
| h_{FE} Classifications | Q | R | S |
| Symbol | | | |
| h_{FE} Range | 120 270 | 180 390 | 270 560 |
| Marking | HBQ | HBR | HBS |

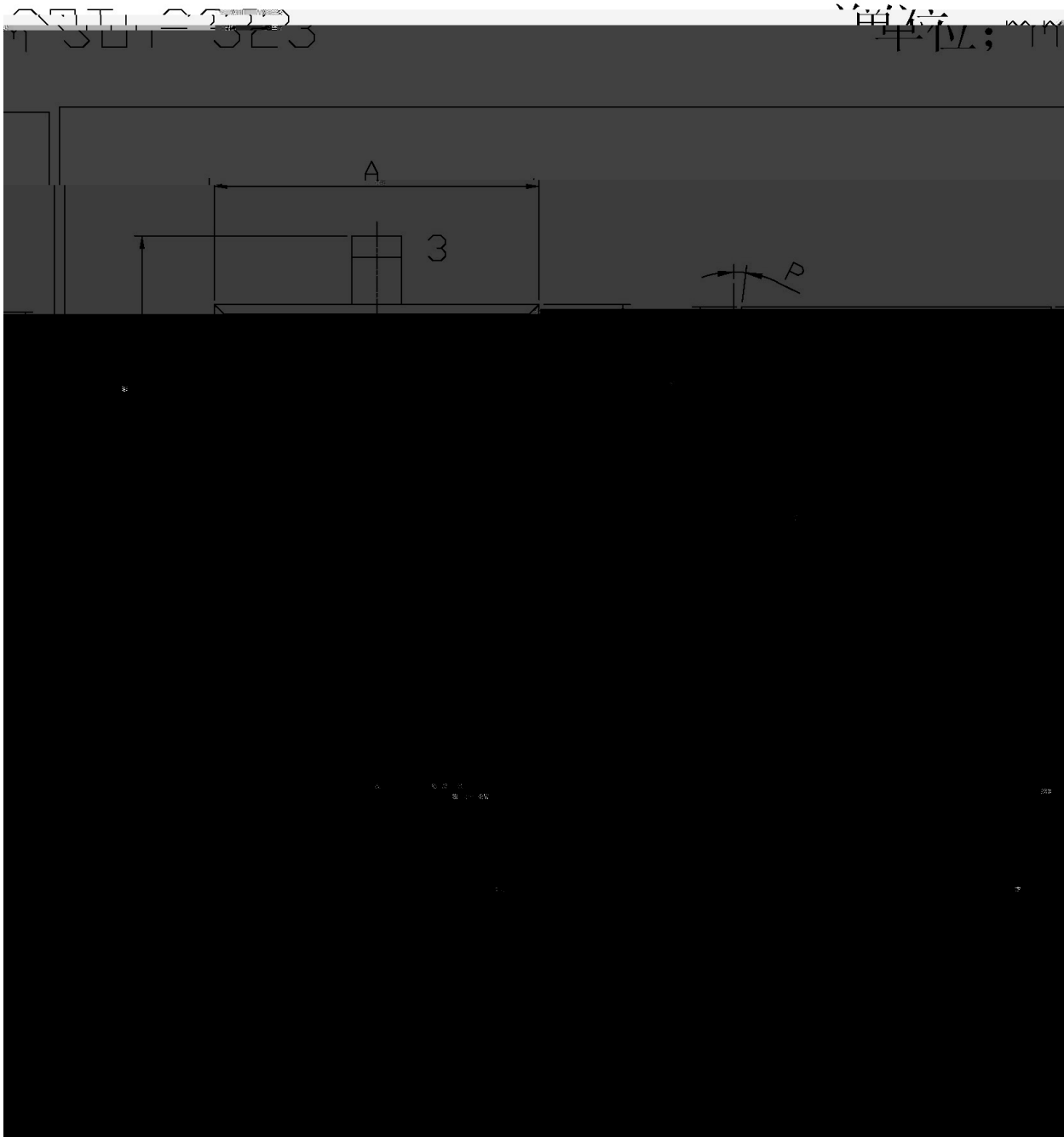
| Parameter | Symbol | Rating | Unit |
|--------------------------------|-----------|---------|------|
| Collector to Base Voltage | V_{CBO} | 60 | V |
| Collector to Emitter Voltage | V_{CEO} | 50 | V |
| Emitter to Base Voltage | V_{EBO} | 7.0 | V |
| Collector Current - Continuous | I_C | 150 | mA |
| 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 | | | | | | |

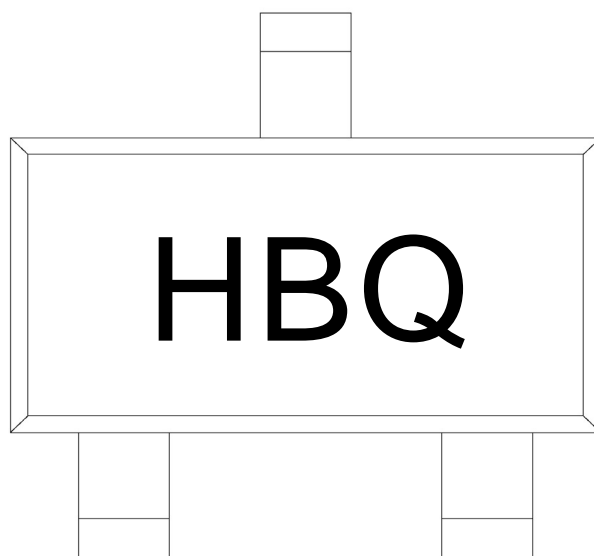
6 -1.6743 TD0540078 n5 55.98 438.8003 Tm-0.0026Tw()Tj10.5 0 0 10V.1 424.Q5 64.

2SC4081W
Rev.E Mar.-2016

/ Package Dimensions



/ Marking Instructions



H

B

Q h_{FE}

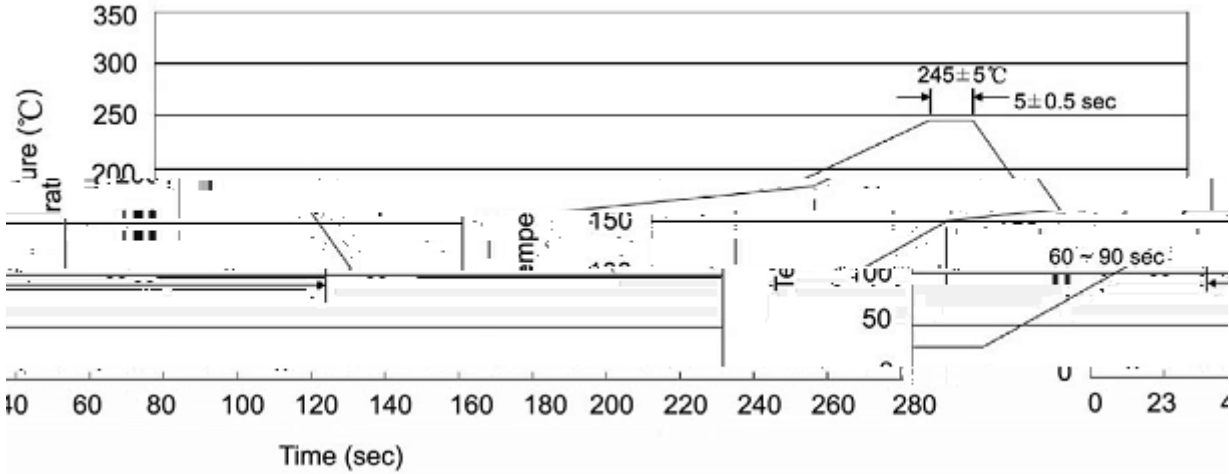
Note:

H: Company Code.

B: Product Type.

Q: h_{FE} Classifications Symbol

() / Resistance to Soldering Heat Test Conditions



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

/ Packaging SPEC.

/ 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 |

/ Notices