

**/ Descriptions**

SOT-23                      NPN                      Silicon NPN transistor in a SOT-23 Plastic Package.

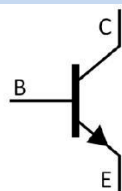
**/ Features**

BRS8550MQ                      AEC-Q101  
Complementary pair with BRS8550MQ, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

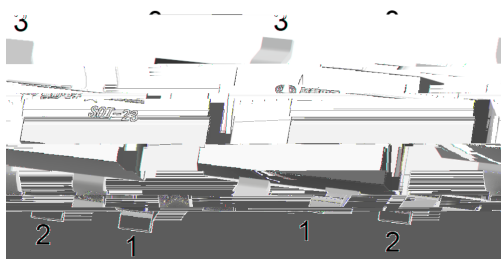
**/ Applications**

Power amplifier applications, Meet the stringent requirements of automotive applications.

**/ Equivalent Circuit**



**/ Pinning**



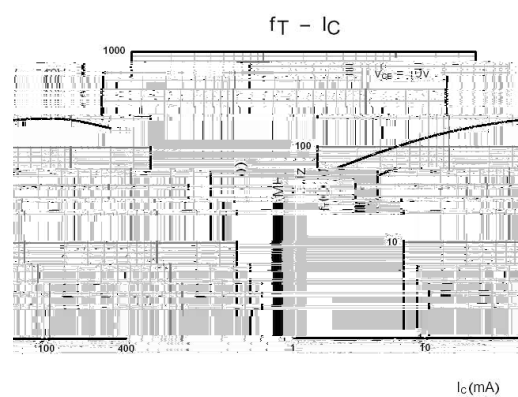
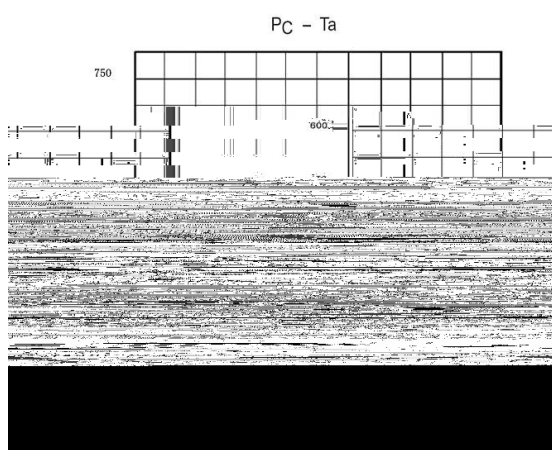
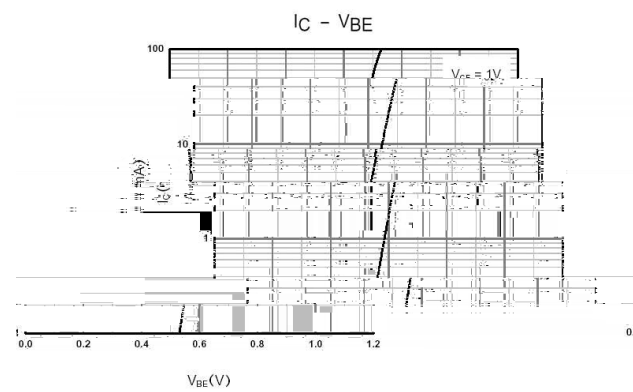
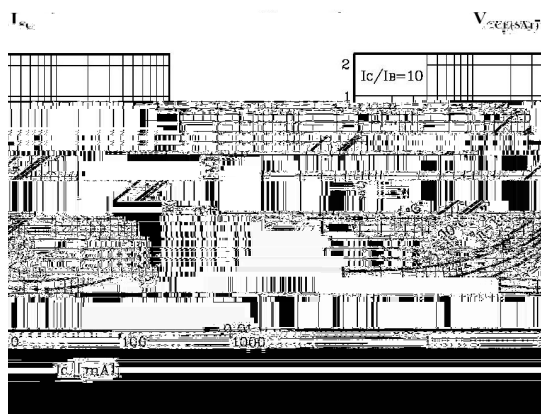
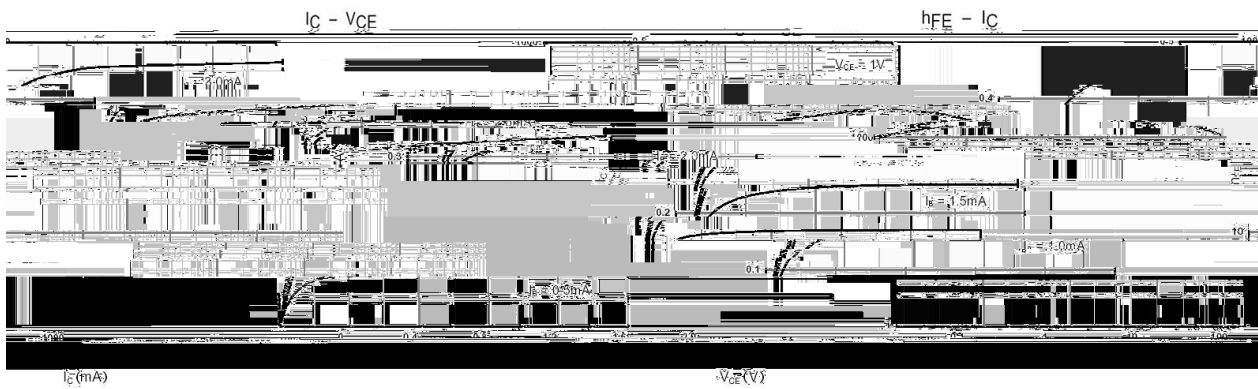
PIN1    Base                      PIN 2    Emitter                      PIN 3    Collector

**/ h<sub>FE</sub> Classifications & Marking**

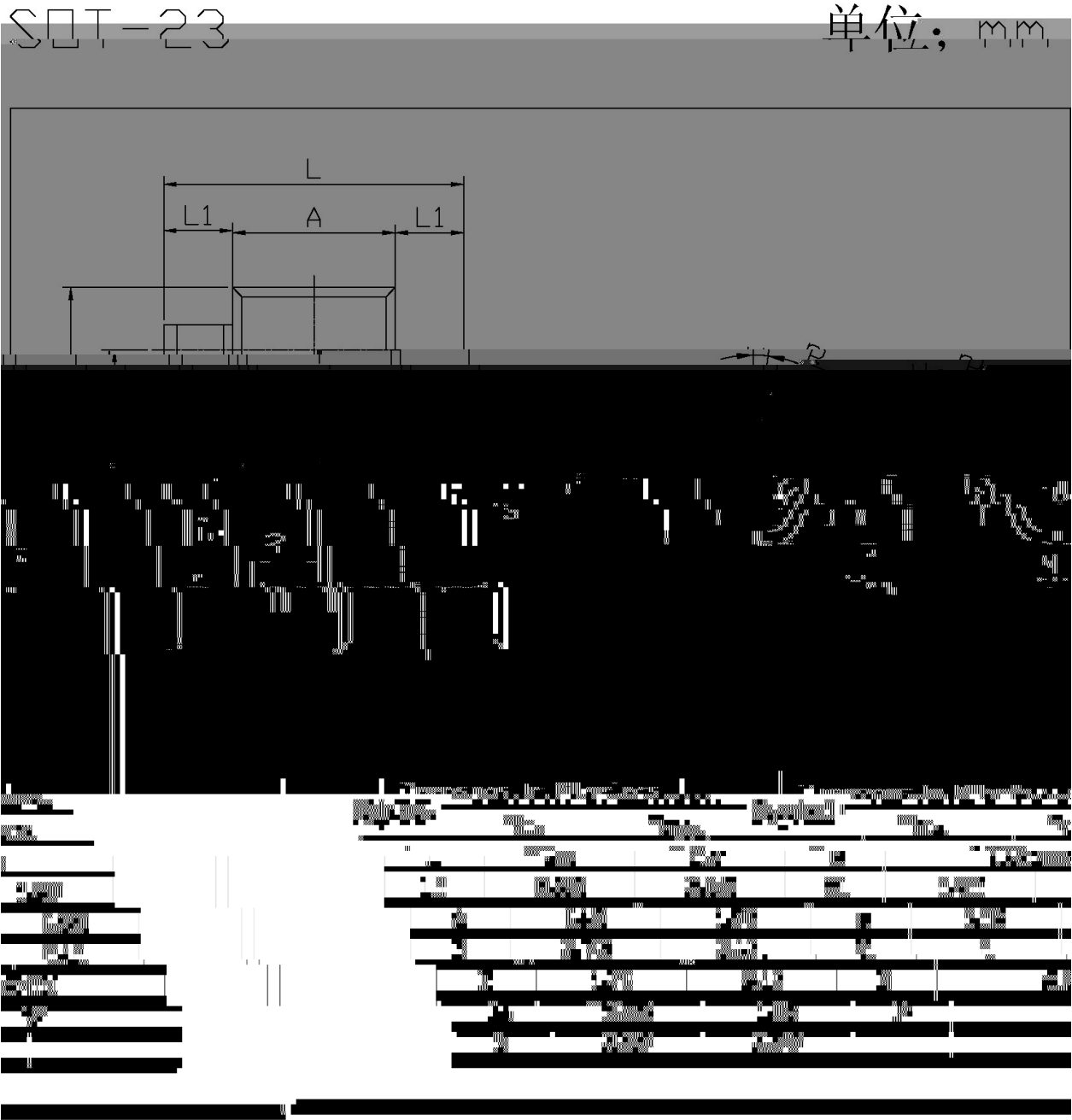
| h <sub>FE</sub> Classifications<br>Symbol | B         | C          | D          |
|-------------------------------------------|-----------|------------|------------|
| h <sub>FE</sub> Range                     | 85    160 | 120    200 | 160    300 |
| Marking                                   | QY3B      | QY3C       | QY3D       |



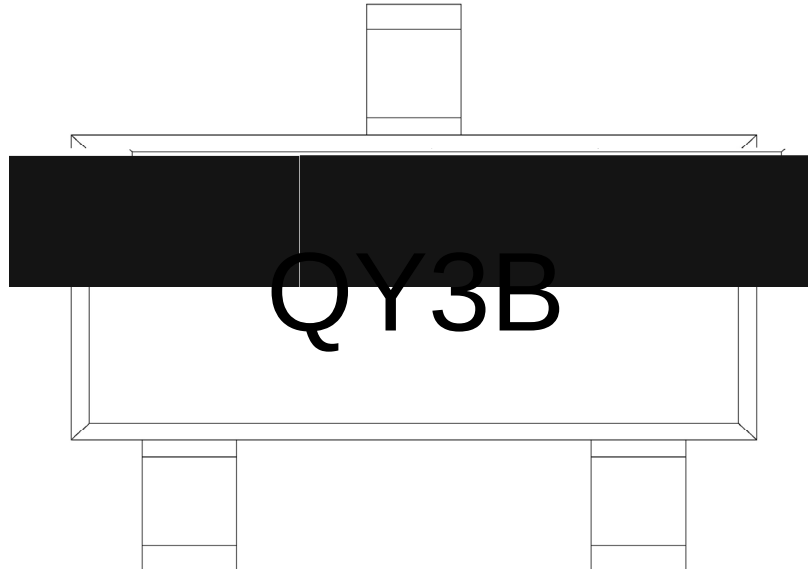
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



fi

' 3

№ h<sub>FE</sub>

Note:

Q: Automobile halogen-free product Code

' 3 Product Type Code

№ h<sub>FE</sub> Classifications Symbol Code

( ) / **Temperature Profile for IR Reflow Soldering(Pb-Free)**

|  |
|--|
|  |
|  |
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|  |
|  |
|  |
|  |

Note:

- |   |         |            |                                         |
|---|---------|------------|-----------------------------------------|
| 1 | 150 200 | 60 120sec; | 1.Preheating:150~200 , Time:60~120sec.  |
| 2 | 255±5   | 5±0.5sec;  | 2.Peak Temp.:255±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 <sup>3</sup> ) |
|--------------|-------|-----------|-------------------------|