

## / Revised record

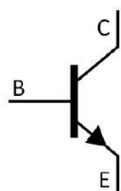
| E | 2016-3    |     |                                                                             |  |  |
|---|-----------|-----|-----------------------------------------------------------------------------|--|--|
| A | 2022-4-27 | all | BR/Q<br>AEC-Q101<br>, H Q<br>245±5°C<br>5±0.5sec<br>255±5°C<br>0.5sec<br>5± |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |
|   |           |     |                                                                             |  |  |

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

BRBC857WQ                      AEC-Q101  
High current, low voltage complementary pair with BRBC857WQ, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

General purpose switching and amplification, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



PIN1    Emitter                      PIN 2    Base                      PIN 3    Collector

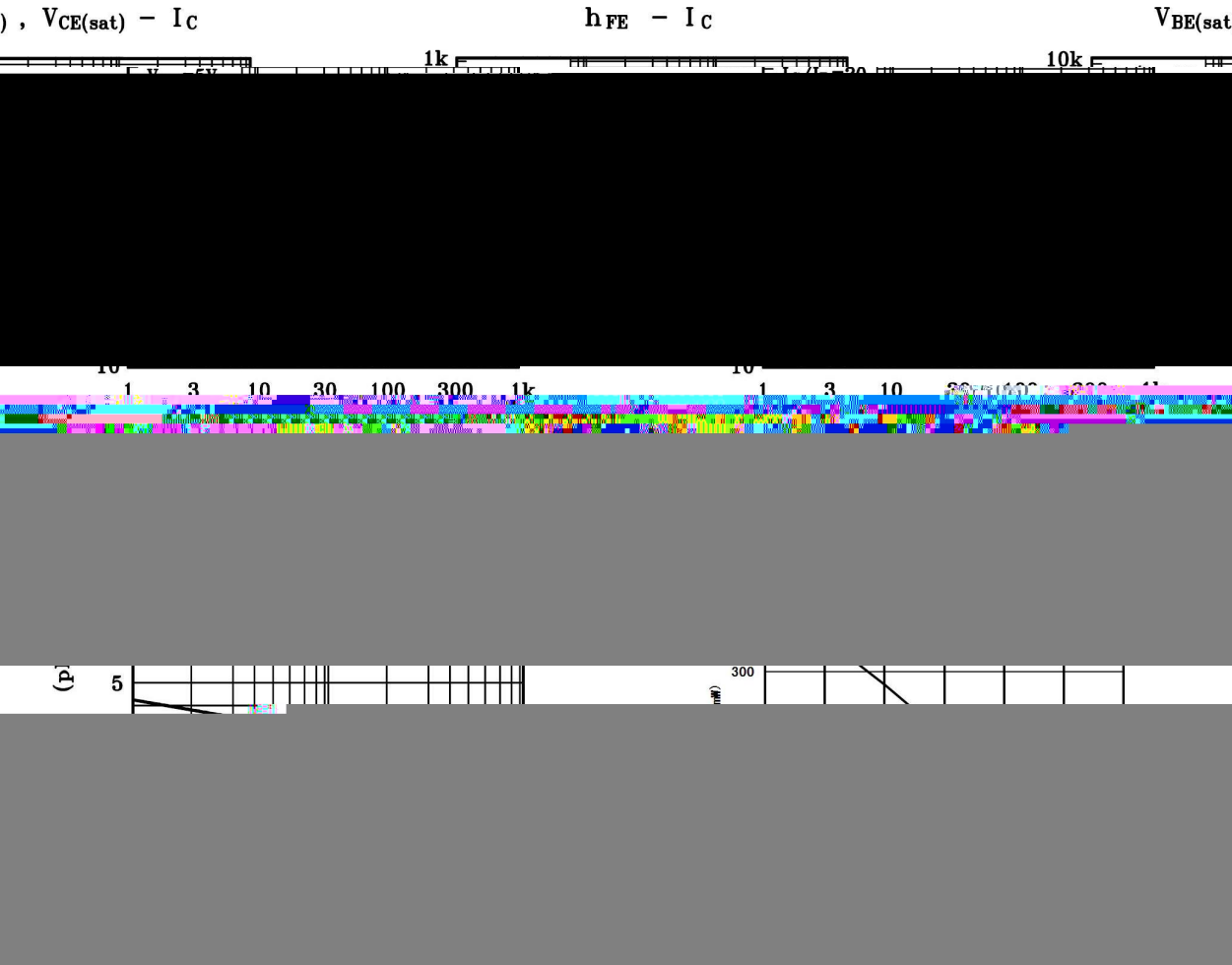
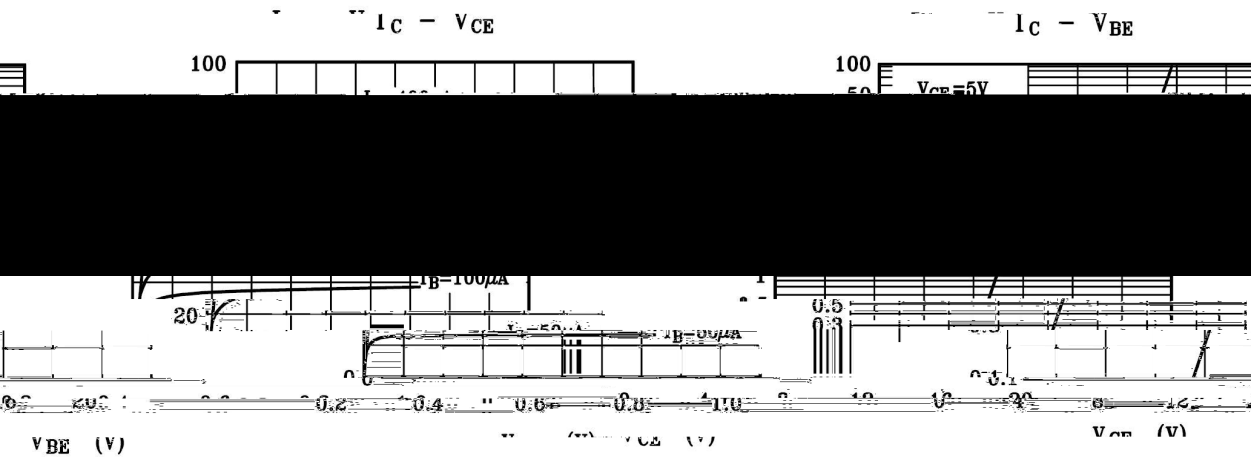
/  $h_{FE}$  Classifications & Marking

| $h_{FE}$ Classifications<br>Symbol | A       | B       | C       |
|------------------------------------|---------|---------|---------|
| $h_{FE}$ Range                     | 110~220 | 200~450 | 420~800 |
| Marking                            | Q1E     | Q1F     | Q1G     |

**BRBC847WQ**

Rev.A A

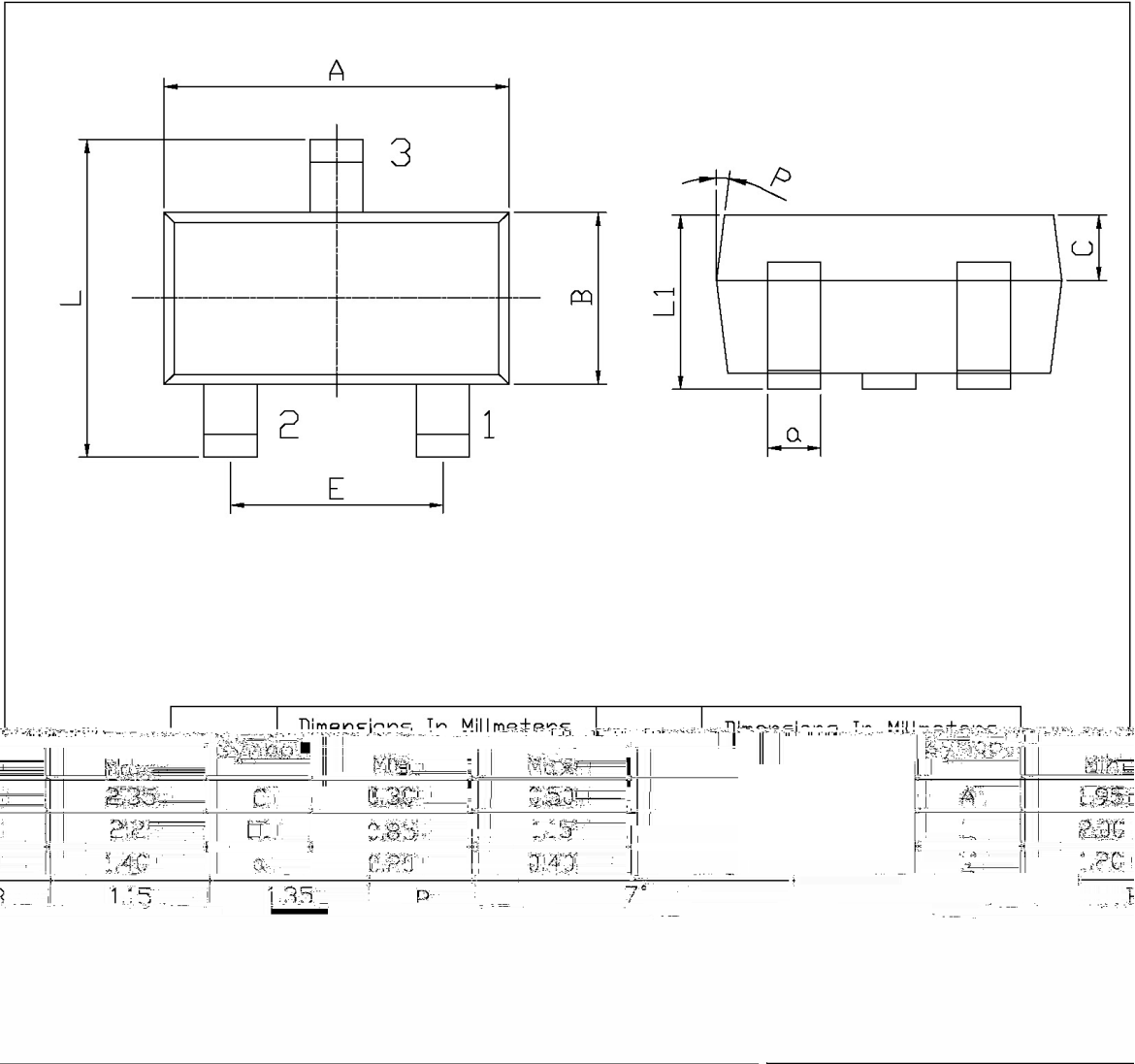
/ Electrical Characteristic Curve



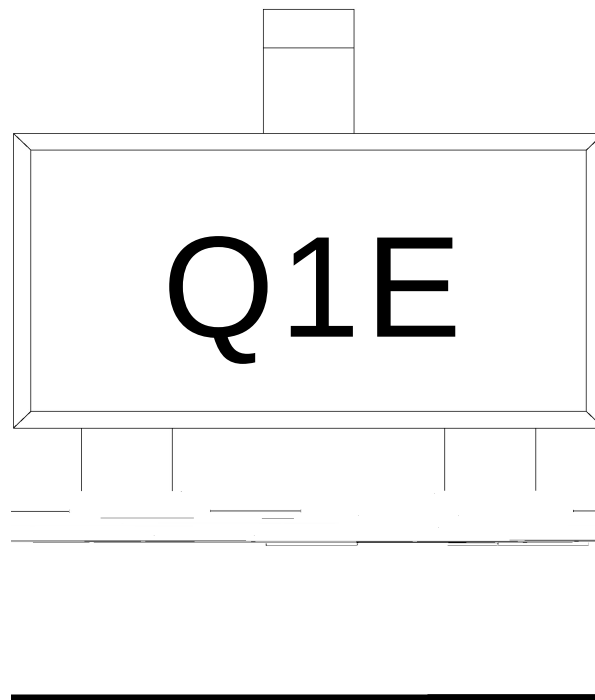
/ Package Dimensions

SOT-323

单位; mm



**/ Marking Instructions**



Q

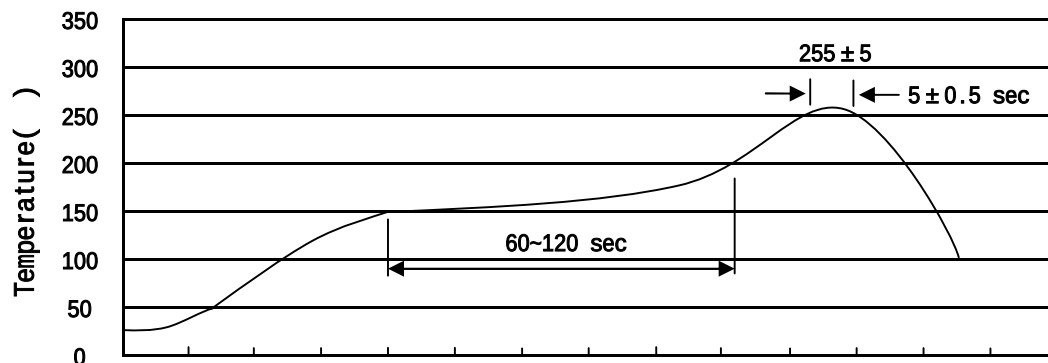
1E

Note:

Q: Automobile halogen-free product Code

1E: Product Type

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



Note:

- |   |       |     |           |         |                                          |
|---|-------|-----|-----------|---------|------------------------------------------|
| 1 | 150   | 200 | 60        | 120sec; | 1.Preheating:150~200°C, Time:60~120sec.  |
| 2 | 255±5 |     | 5±0.5sec; |         | 2.Peak Temp.:255±5°C, Duration:5±0.5sec. |
| 3 |       | 2   | 10°C/sec. |         | 3. Cooling Speed: 2~10°C/sec.            |

## / Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

## / Packaging SPEC.

/ REEL

| Package Type<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Reel                                    | Inner Box 盒 | Outer Box 箱 |
| SOT-323              | 3,000              | 10                      | 30,000                 | 6                            | 180,000                | 7" x8                                   | 180×120×180 | 390×385×205 |

## / Notices