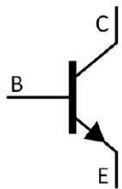


## / Descriptions

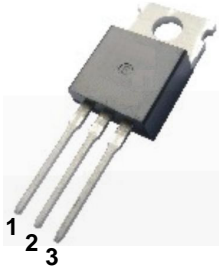
## / Features

## / Applications

## / Equivalent Circuit



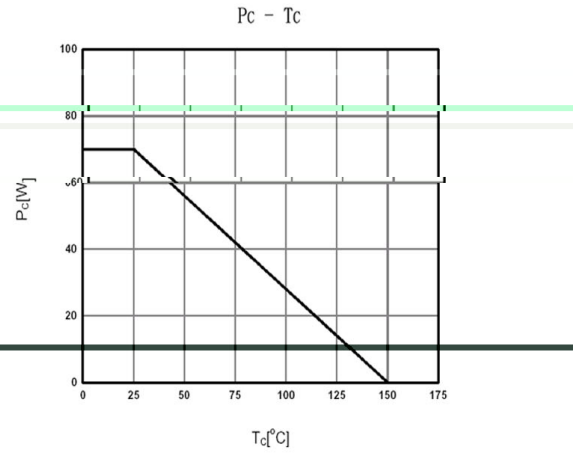
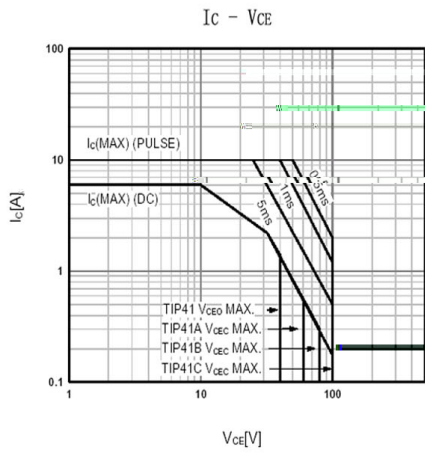
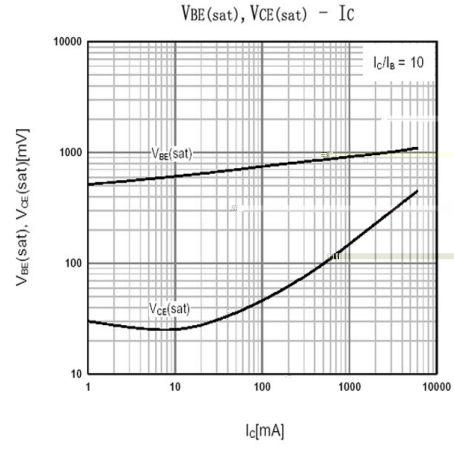
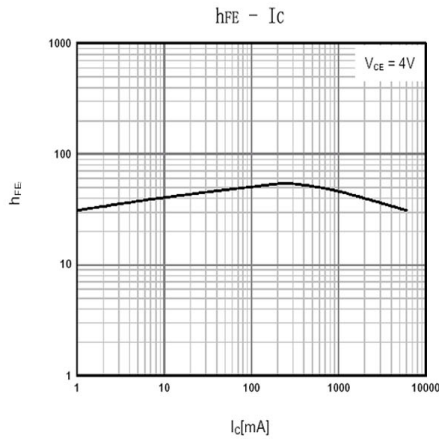
## / Pinning



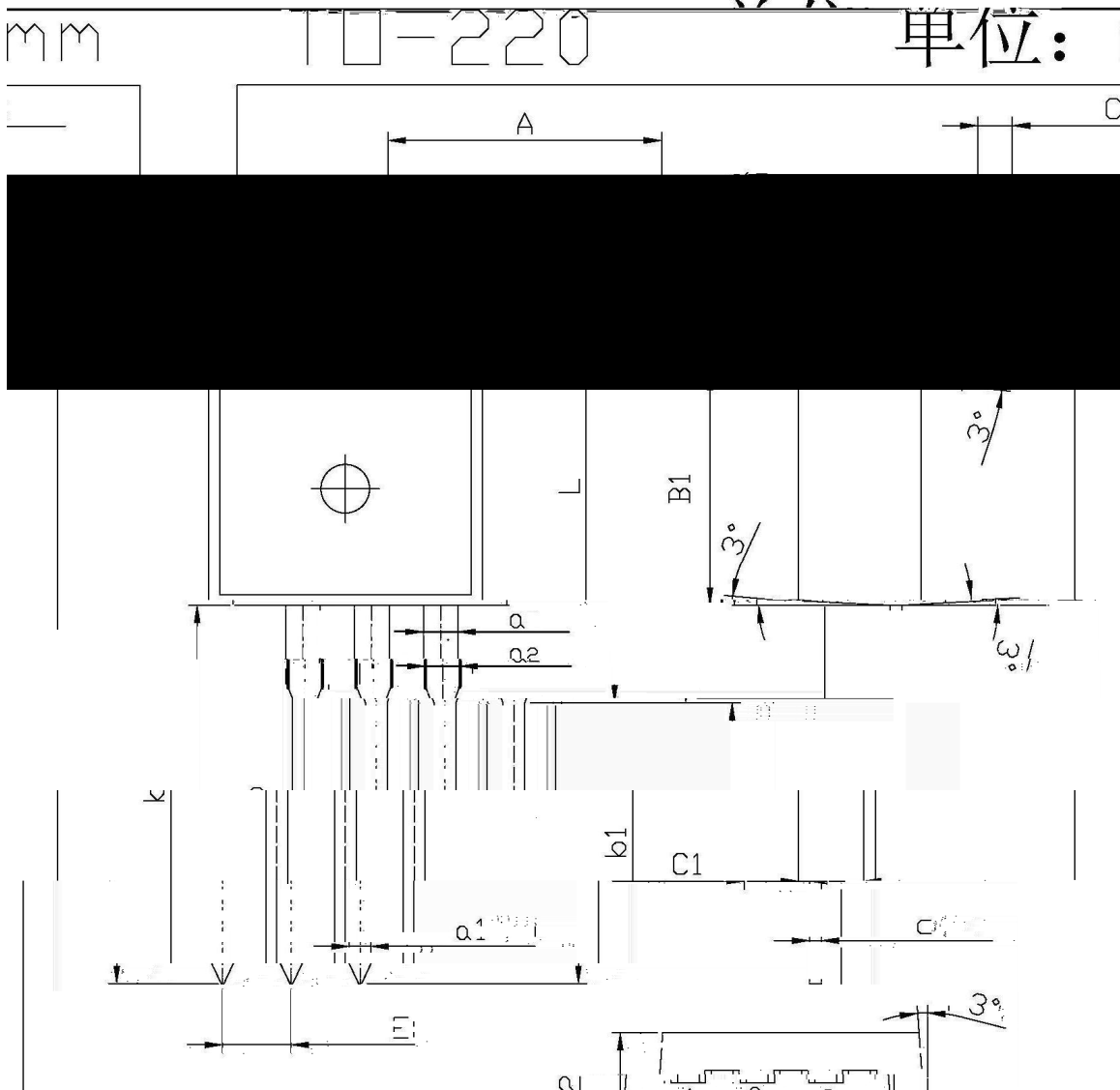
## / $h_{FE}$ Classifications & Marking



/ Electrical Characteristic Curve

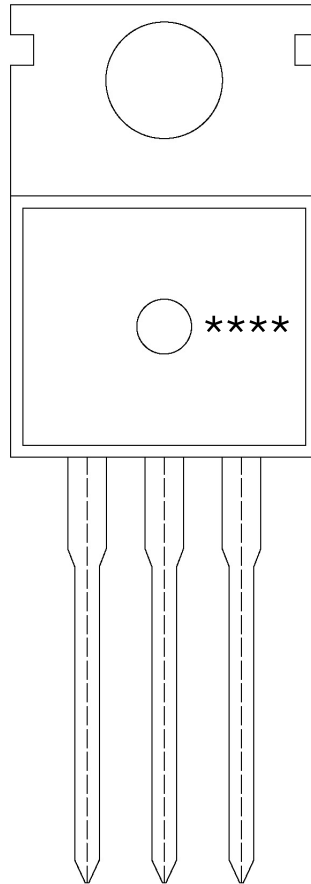


/ Package Dimensions

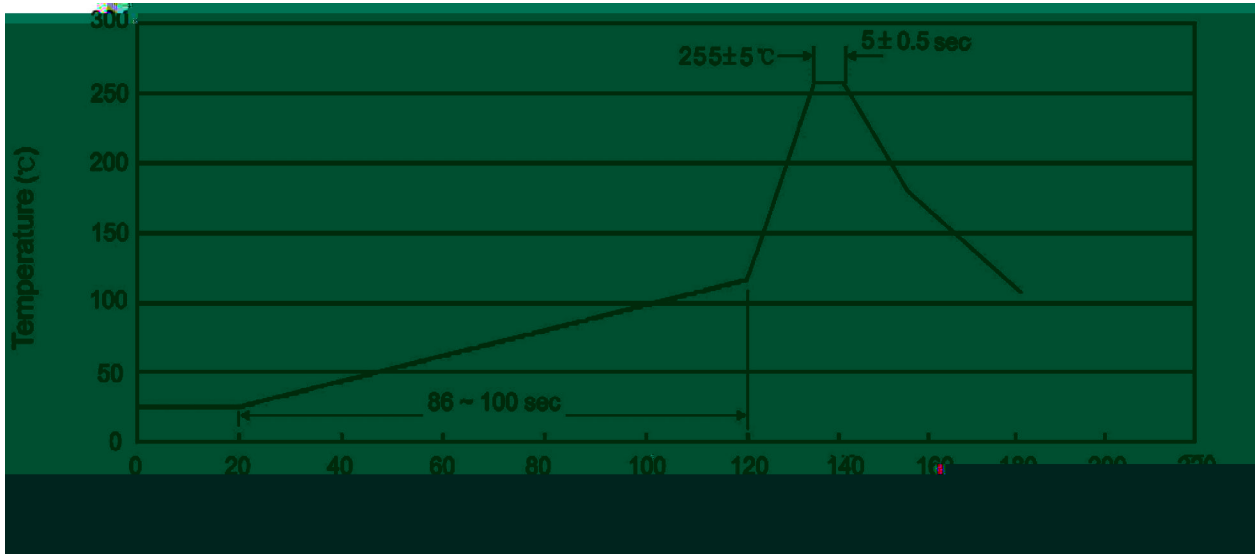


| Symbol | Dimensions in Millimeters |      | Symbol | Dimensions in Millimeters |     |
|--------|---------------------------|------|--------|---------------------------|-----|
|        | Min                       | Max  |        | Min                       | Max |
| A      | 9.8                       | 10.2 | C      | 1.2                       | 1.4 |
| R      | 3.56                      | 3.64 | B      | 6.3                       | 6.7 |
| B1     | 9.0                       | 9.4  | k      | 15.7                      |     |
| a      | 1.22                      | 1.32 | a1     | 0.9                       |     |
| a2     | 1.25                      | 1.45 | b1     | 2.6                       |     |
| C1     | 0.4                       | 0.6  | C1     | 2.2                       | 2.6 |

/ Marking Instructions



( ) / Temperature Profile for Dip Soldering(Pb-Free)



/ Resistance to Soldering Heat Test Conditions

/ Packaging SPEC.

|          |           |                |                 |                       |                 | Bag     | Inner Box   | Outer Box   |
|----------|-----------|----------------|-----------------|-----------------------|-----------------|---------|-------------|-------------|
|          | Units/Bag | Bags/Inner Box | Units/Inner Box | Inner Boxes/Outer Box | Units/Outer Box |         |             |             |
| TO-220/F | 200       | 10             | 2,000           | 5                     | 10,000          | 135×190 | 237×172×102 | 560×245×195 |

|          |            |                 |                 |                       |                 | Tube         | Inner Box  | Outer Box   |
|----------|------------|-----------------|-----------------|-----------------------|-----------------|--------------|------------|-------------|
|          | Units/Tube | Tubes/Inner Box | Units/Inner Box | Inner Boxes/Outer Box | Units/Outer Box |              |            |             |
| TO-220/F | 50         | 20              | 1,000           | 5                     | 5,000           | 532×31.4×5.5 | 555×164×50 | 575×290×180 |

/ Notices