

**/ Descriptions**

TO-252

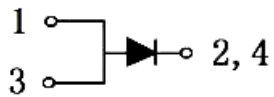
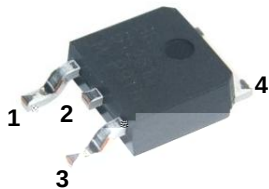
Schottky diode in a TO-252 Plastic Package.

**/ Features**

High Forward Surge Capability,Ultra Low Forward Voltage Drop, Excellent High Temperature Stability.

**/ Applications**

For Switching power supply, Converters, Free-Wheeling diodes, and Reverse battery protection.

**/ Equivalent Circuit****/ Pinning**

PIN1 Anode

PIN 2,4 Cathode

PIN 3 Anode

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

See Marking Instructions.

**/ Absolute Maximum Ratings(Ta=25 )**

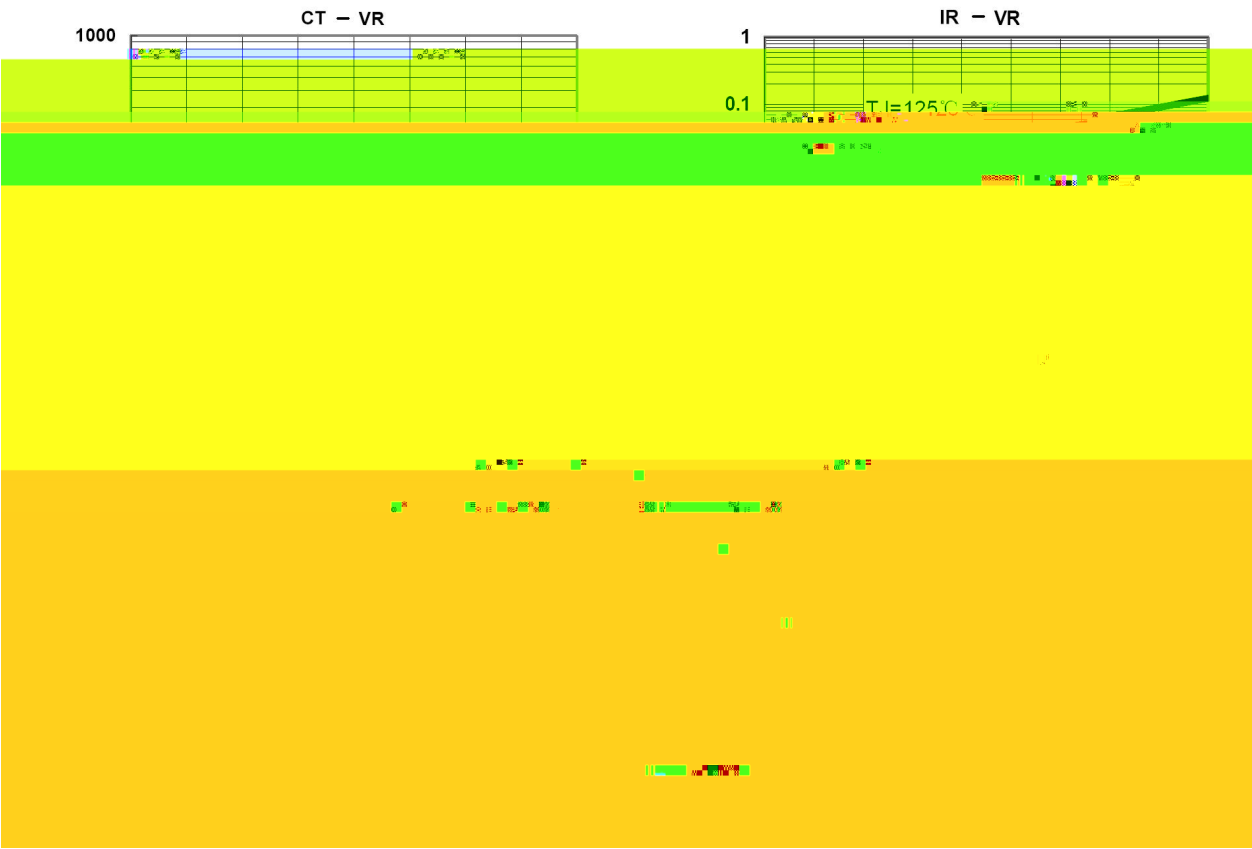
| Parameter                                                                         | Symbol          | Rating  | Unit |
|-----------------------------------------------------------------------------------|-----------------|---------|------|
| Peak Repetitive Reverse Voltage                                                   | $V_{RRM}$       | 100     | V    |
| Average Rectified Forward Current (50% duty cycle @ $T_C = 105^{\circ}\text{C}$ ) | $I_{F(AV)}$     | 5.0     | A    |
| Non Repetitive Peak Surge Current                                                 | $I_{FSM}$       | 120     | A    |
| Junction Temperature Range                                                        | $T_j$           | -55~150 |      |
| Storage Temperature Range                                                         | $T_{stg}$       | -55~150 |      |
| Typical Thermal Resistance Junction to Ambient                                    | $R_{\theta JA}$ | 25      | /W   |

**/ Electrical Characteristics(Ta=25 )**

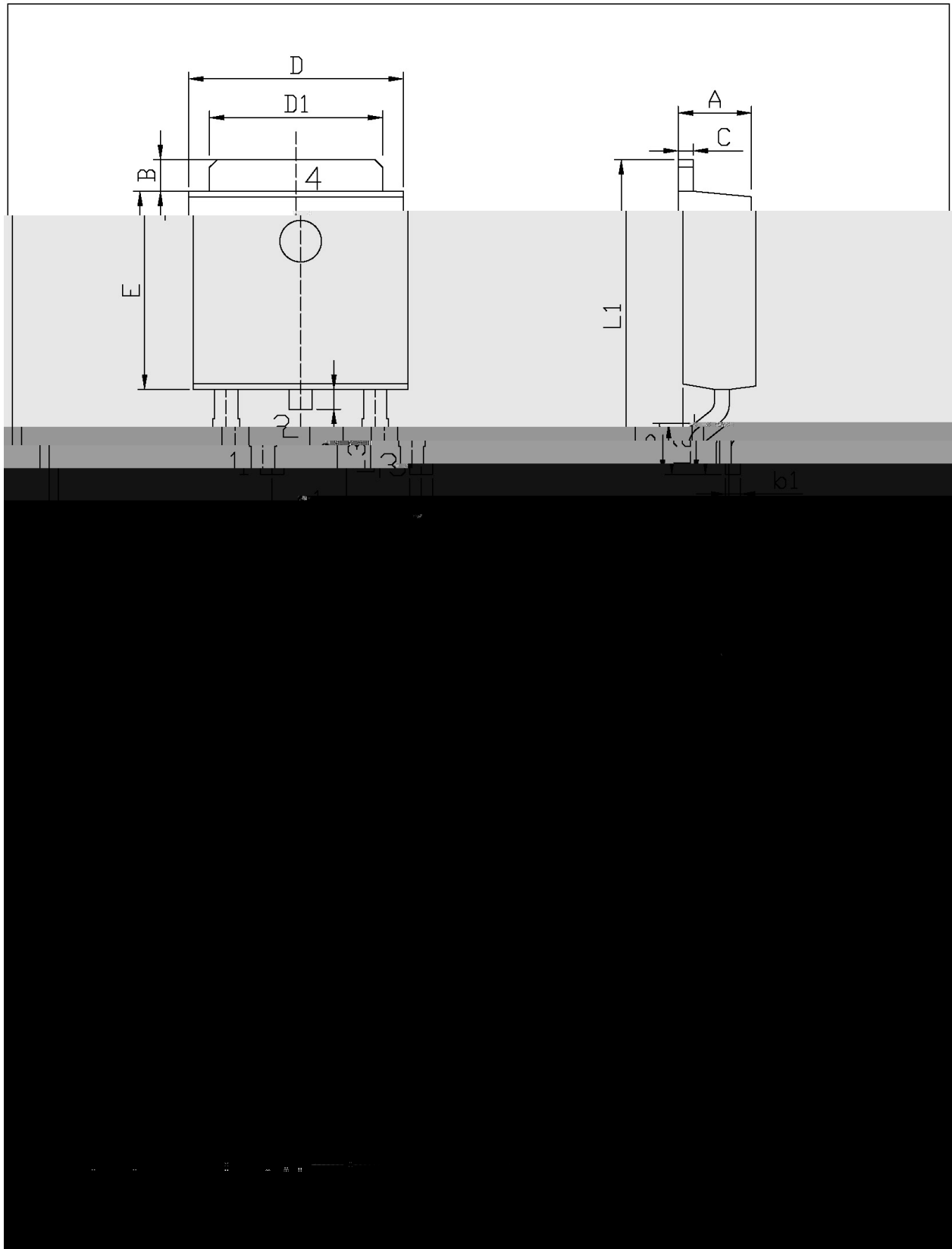
| Parameter                     | Symbol | Test Conditions                             | Min | Typ | Max  | Unit |
|-------------------------------|--------|---------------------------------------------|-----|-----|------|------|
| Forward Voltage               | $V_F$  | $I_F=5\text{A}$ $T_j=25^{\circ}\text{C}$    |     |     | 0.85 | V    |
|                               |        | $I_F=5\text{A}$ $T_j=125^{\circ}\text{C}$   |     |     | 0.70 | V    |
| Instantaneous Reverse Current | $I_R$  | $V_R=100\text{V}$ $T_j=25^{\circ}\text{C}$  |     |     | 1.0  | mA   |
|                               |        | $V_R=100\text{V}$ $T_j=125^{\circ}\text{C}$ |     |     | 10   | mA   |

\*Pulse Width < 300  $\mu\text{s}$ , Duty Cycle <2%

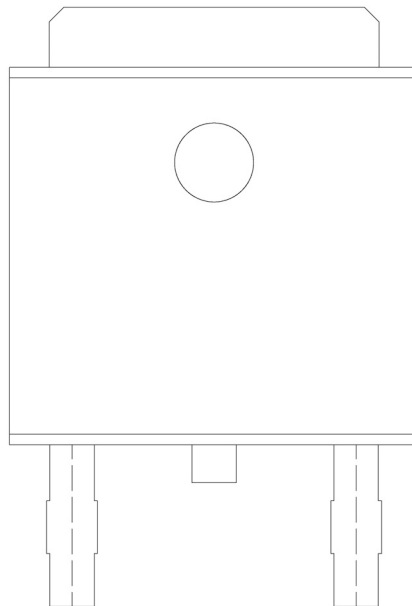
/ Electrical Characteristic Curve



**/ Package Dimensions**



**/ Marking Instructions**



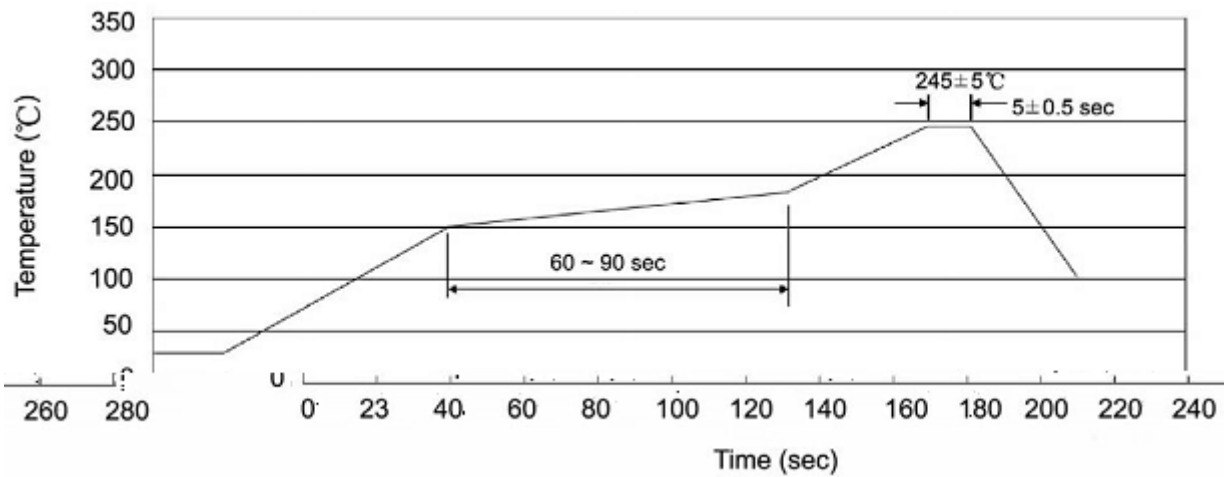
BR  
5100  
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Note:

BR:                      Company Code  
5100



( ) /



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<br>封装形式 | Units 包装数量 |      |     |     |     | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |   |   |
|----------------------|------------|------|-----|-----|-----|-----------------------------------------|---|---|
|                      | 只 卷盘       | 卷盘 盒 | 只 盒 | 盒 箱 | 只 箱 |                                         | 盒 | 箱 |
|                      |            |      |     |     |     | "                                       |   |   |

## / TUBE

| Package Type<br>封装形式 | Units 包装数量 |      |     |     |     | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |   |   |
|----------------------|------------|------|-----|-----|-----|-----------------------------------------|---|---|
|                      | 只 套管       | 套管 盒 | 只 盒 | 盒 箱 | 只 箱 | 套管                                      | 盒 | 箱 |
|                      |            |      |     |     |     |                                         |   |   |

## / Notices