

**/ Descriptions**

TO-263

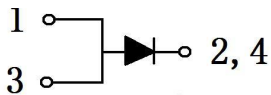
Schottky Diode in a TO-263 Plastic Package.

**/ Features**

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

**/ Applications**

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

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

PIN1 Anode

PIN 2,4 Cathode

PIN 3 Anode

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

See Marking Instructions.

/ Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

| Parameter                                                                              | Symbol                            | Rating   | Unit |
|----------------------------------------------------------------------------------------|-----------------------------------|----------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RM}$<br>$V_{RSM}$<br>$V_{DC}$ | 100      | V    |
| RMS Reverse Voltage                                                                    | $V_{RMS}$                         | 70       | V    |
| Average forward rectified current                                                      | $I_{F(AV)}$                       | 1×10     | A    |
| Non Repetitive Peak Surge Current                                                      | $I_{FSM}$                         | 200      | A    |
| Thermal Resistance Junction to Case                                                    | $R_{JC}$                          | 2.8      | /W   |
| Junction and Storage Temperature Range                                                 | $T_j$ $T_{stg}$                   | -55 +150 |      |

/ Electrical Characteristics( $T_a=25^\circ\text{C}$ )

| Parameter                     | Symbol          | Test Conditions                          | Min | Typ  | Max  | Unit |
|-------------------------------|-----------------|------------------------------------------|-----|------|------|------|
| Reverse Voltage               | $V_{(BR)R}$     | $I_R=1\text{mA}(T_a=25^\circ\text{C})$   | 100 |      |      | V    |
| Forward Voltage               | $V_F$           | $I_F=2\text{A}(T_a=25^\circ\text{C})$    |     | 0.41 | 0.45 | V    |
|                               |                 | $I_F=10\text{A}(T_a=25^\circ\text{C})$   |     | 0.58 | 0.65 | V    |
|                               |                 | $I_F=2\text{A}(T_a=125^\circ\text{C})$   |     | 0.31 | 0.40 | V    |
|                               |                 | $I_F=10\text{A}(T_a=125^\circ\text{C})$  |     | 0.55 | 0.65 | V    |
| Instantaneous Reverse Current | $I_R$<br>Note 1 | $V_R=100\text{V}(T_a=25^\circ\text{C})$  |     |      | 150  | A    |
|                               |                 | $V_R=100\text{V}(T_a=125^\circ\text{C})$ |     |      | 25   | mA   |

/Notes

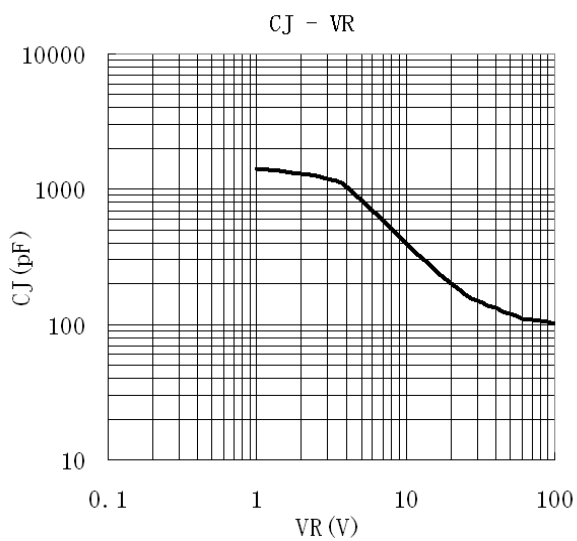
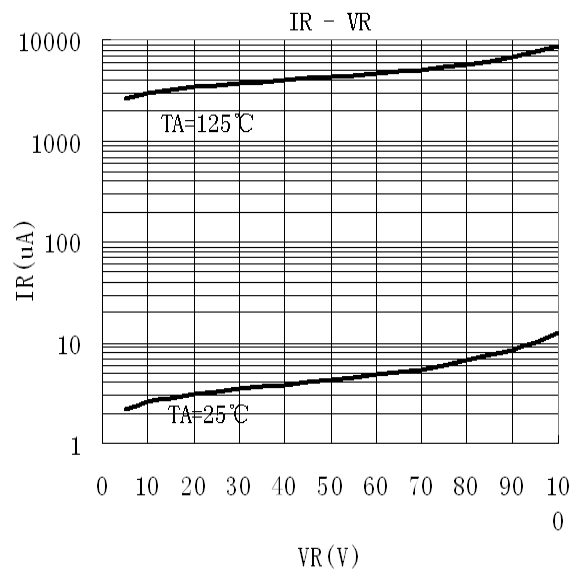
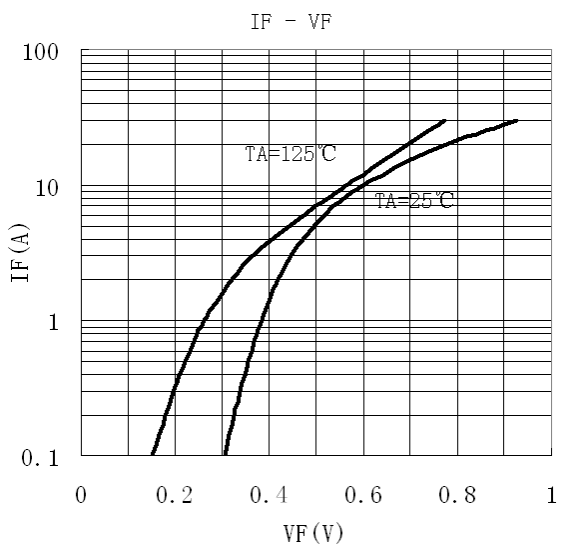
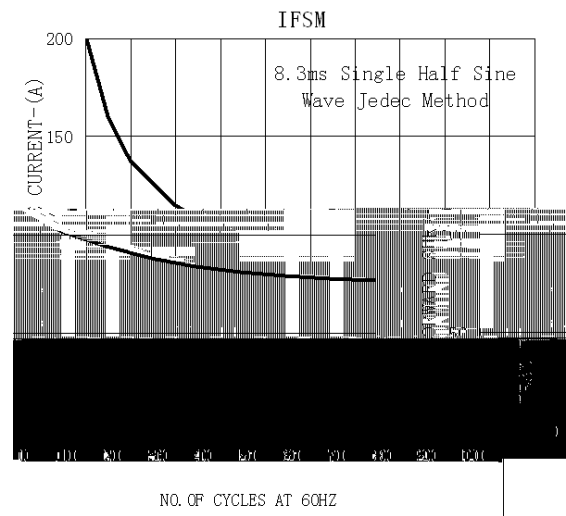
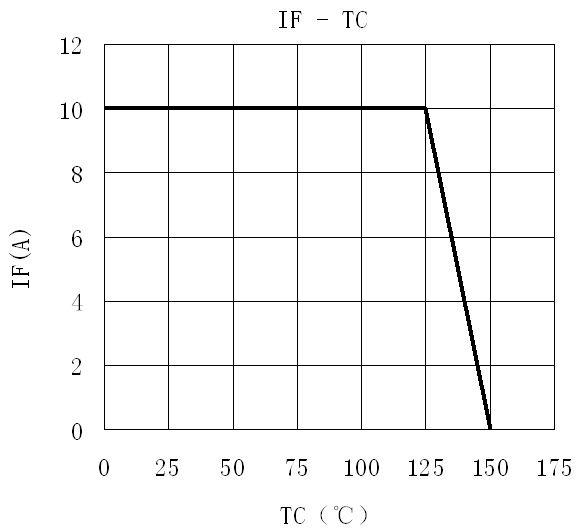
1.

Short duration pulse test used to minimize self-heating effect.

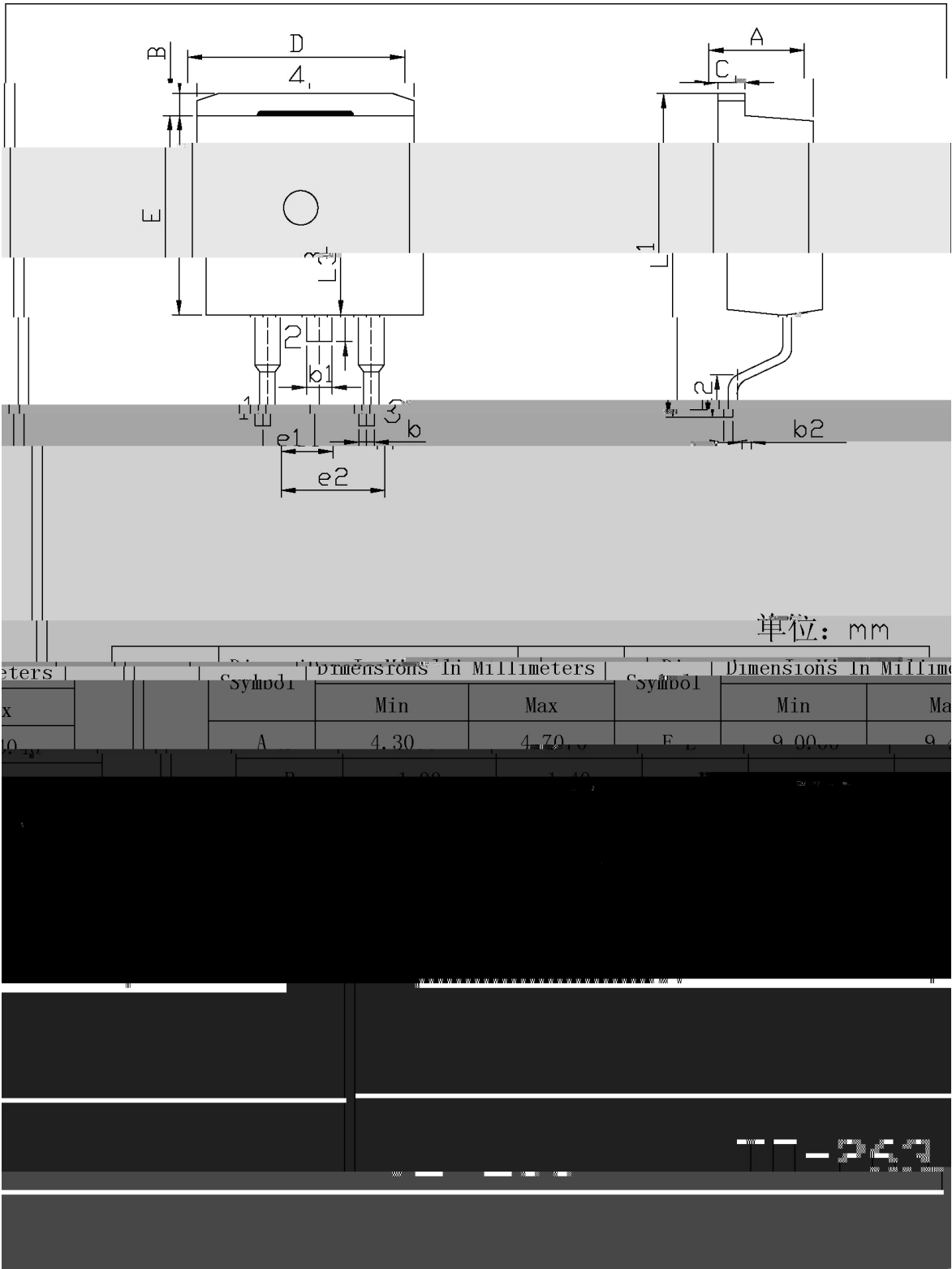
2.

Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve

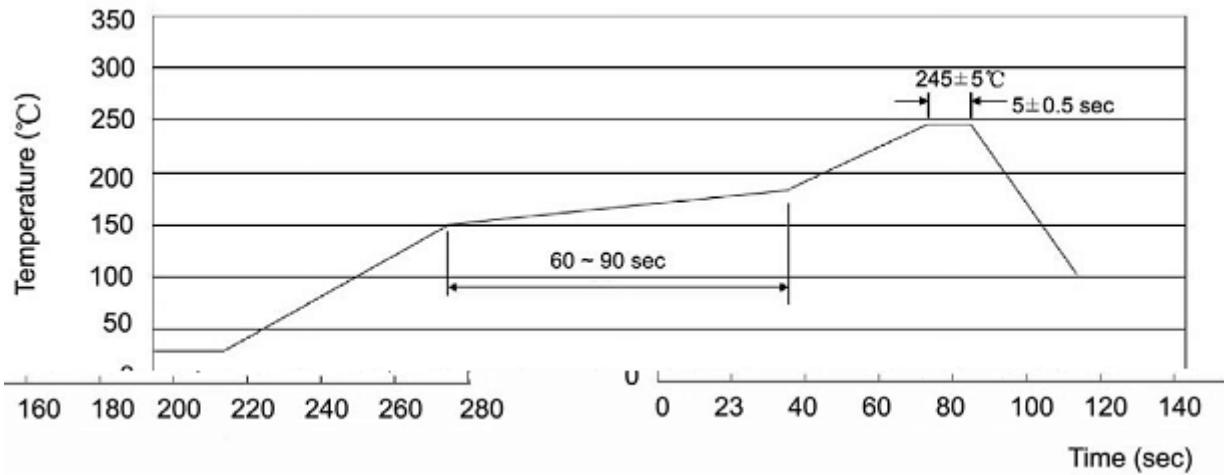


/ Package Dimensions



**LV10T100B**

( ) /



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