

## / Descriptions

Schottky Barrier Diode in a TO-277 Plastic Package.

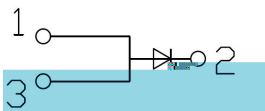
## / Features

Low forward voltage drop, low power losses, High efficiency operation. HF Product.

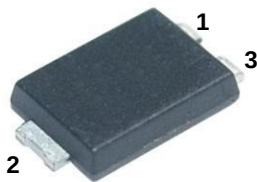
## / Applications

For use in high frequency inverters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.

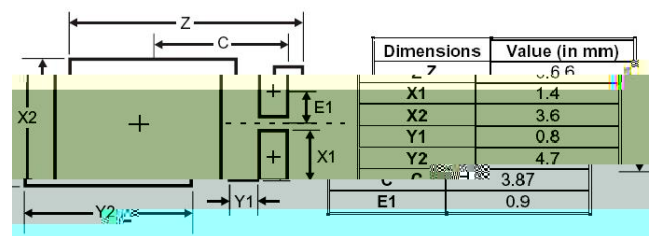
## / Equivalent Circuit



## / Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode



Suggested Pad layout

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

See Marking Instructions.

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

| 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 Voltage                                                                            | $V_{RMS}$                         | 70      | V    |
| Average Rectified Forward Current                                                      | $I_{F(AV)}$                       | 1×5     | A    |
| Non Repetitive Peak Surge Current                                                      | $I_{FSM}$                         | 150     | A    |
| Thermal Resistance Junction to Air (Note 1)                                            | $R_{\theta JA}$                   | 110     | °C/W |
| Junction and Storage Temperature Range                                                 | $T_J$ $T_{stg}$                   | -65~150 | °C   |

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

| Parameter                     | Symbol         | Test Conditions             | Min | Typ  | Max  | Unit |
|-------------------------------|----------------|-----------------------------|-----|------|------|------|
| Breakdown Voltage             | $V_{BR}$       | $I_R=1mA(Ta=25^{\circ}C)$   | 100 |      |      | V    |
| Forward Voltage               | $V_F$          | $I_F=1A(Ta=25^{\circ}C)$    |     | 0.41 | 0.55 | V    |
|                               |                | $I_F=1A(Ta=125^{\circ}C)$   |     | 0.30 | 0.50 | V    |
|                               |                | $I_F=5A(Ta=25^{\circ}C)$    |     | 0.55 | 0.70 | V    |
|                               |                | $I_F=5A(Ta=125^{\circ}C)$   |     | 0.52 | 0.65 | V    |
| Instantaneous Reverse Current | $I_R$ (Note 2) | $V_R=100V(Ta=25^{\circ}C)$  |     | 10   | 150  | μA   |
|                               |                | $V_R=100V(Ta=125^{\circ}C)$ |     |      | 50   | mA   |

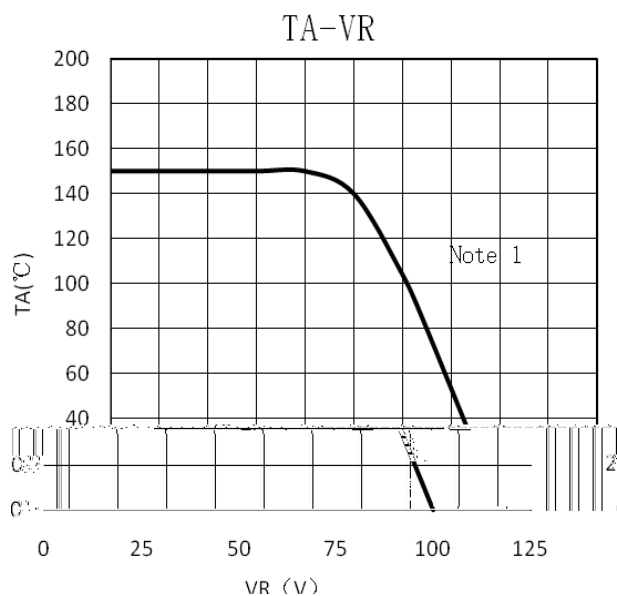
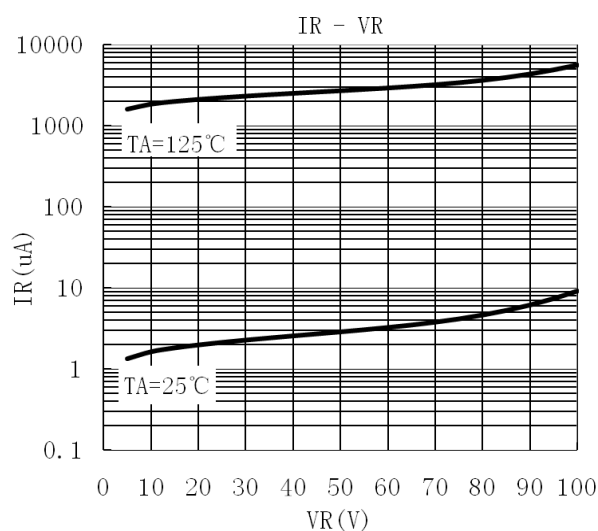
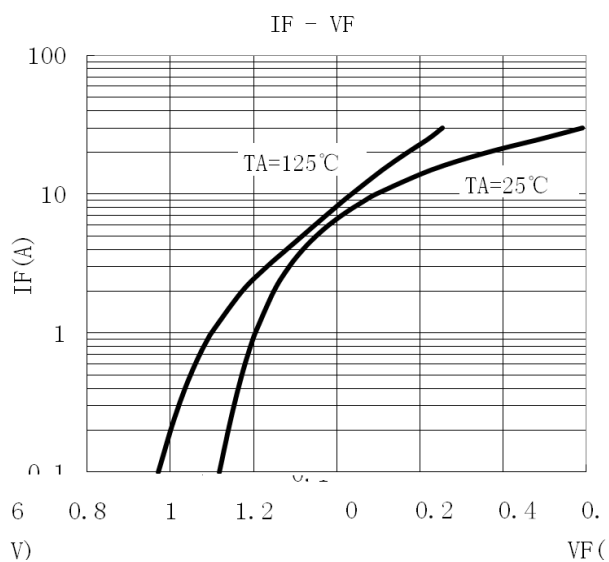
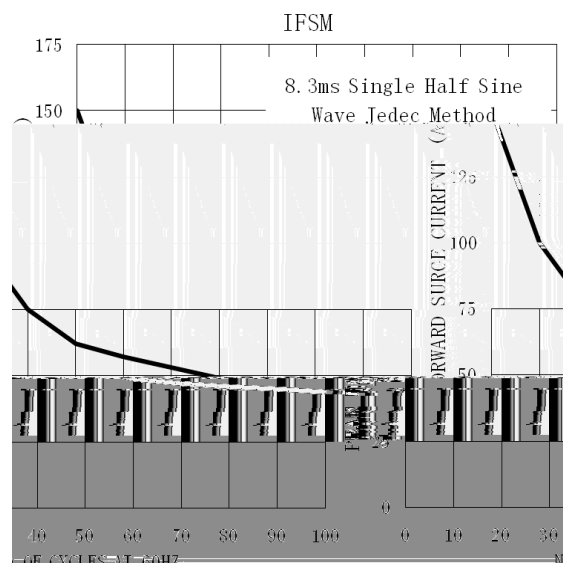
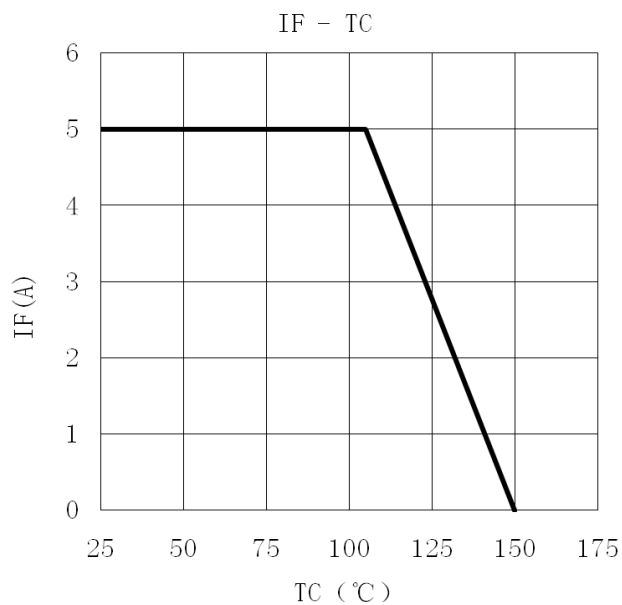
Notes:

FR-4 PCB, 2oz. Copper, minimum recommended pad layout per.

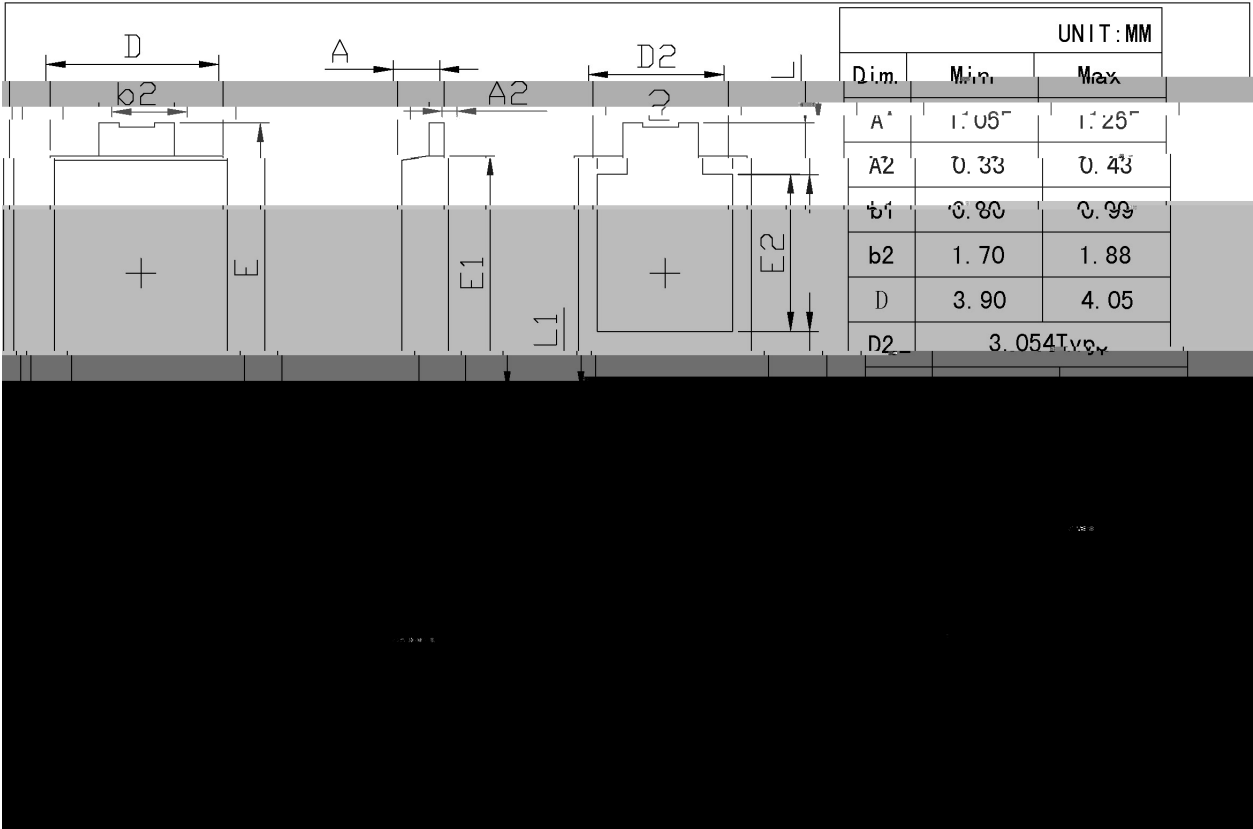
Short duration pulse test used to minimize self-heating effect.

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

**/ Electrical Characteristic Curve**



/ Package Dimensions



**/ Marking Instructions**



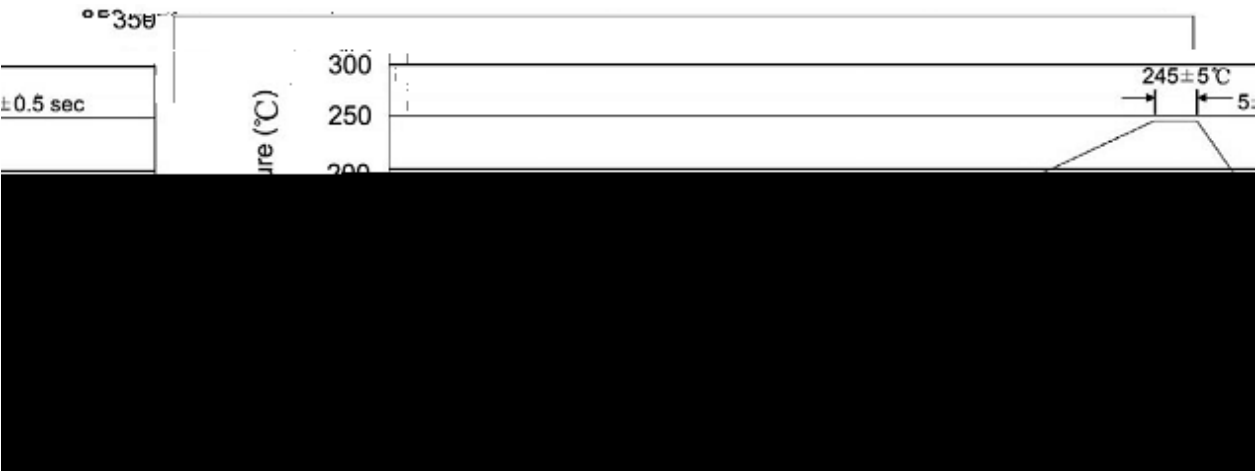
Note:

Product Type.

\*\*\*\*:

Lot No. Code, code change with Lot No.

( ) /



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> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | 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 |
| TO-277               | 5,000              | 3                       | 15,000                 | 6                            | 90,000                 | 13" ×12                                 | 360×360×50  | 380×335×366 |

/ Notices