

**Trench MOS Barrier Schottky Rectifier**

**Reverse Voltage - 150 V**

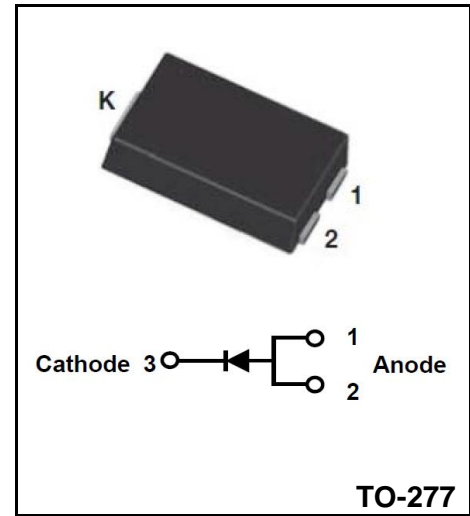
**Forward Current - 15 A**

**FEATURES**

- ◆ Advanced trench technology
- ◆ Low forward voltage drop
- ◆ Low power losses
- ◆ High efficiency operation
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆ Case: TO-277
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026



**Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified**

| Parameter  |           | Symbols         | Value      | Units |
|--|-----------|-----------------|------------|-------|
| Maximum Repetitive Peak Reverse Voltage  |           | $V_{RRM}$       | 150        | V     |
| Maximum RMS voltage  |           | $V_{RMS}$       | 150        | V     |
| Maximum DC Blocking Voltage  |           | $V_{DC}$        | 150        | V     |
| Maximum Average Forward Rectified Current  | Per diode | $I_{F(AV)}$     | 15         | A     |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave superimposed on rated load per diode |           | $I_{FSM}$       | 280        | A     |
| Operating Temperature Range  |           | $T_J$           | -40 ~ +150 | °C    |
| Storage Temperature Range  |           | $T_{STG}$       | -40 ~ +150 | °C    |
| Typical Thermal Resistance Per diode(munted on FR-4 PCB)                                     | TO-277    | $R_{\theta JC}$ | 72         | °C/W  |

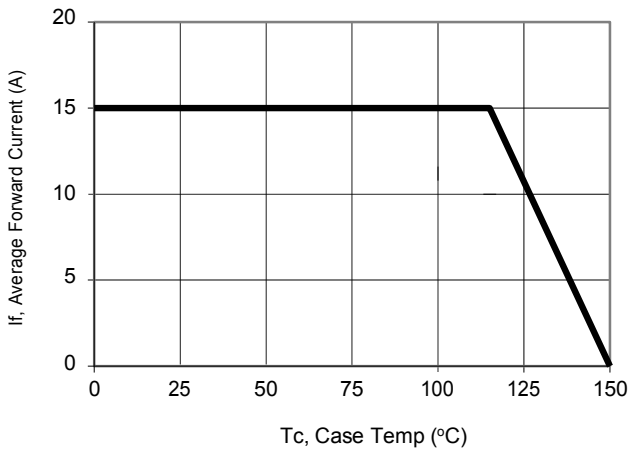
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

**Electrical Characteristics (Per Leg) unless otherwise specified**

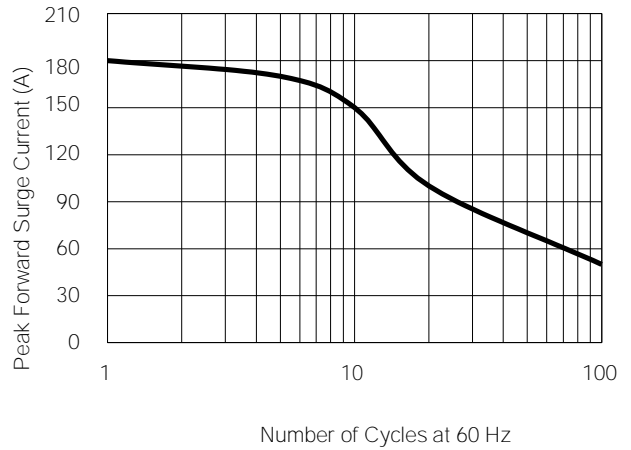
| Characteristics  |          | Symbols | Value |      | Units |
|--|----------|---------|-------|------|-------|
| Forward Voltage Drop(Note2)                                      |          | $V_F$   | Typ   | Max  | V     |
| at $I_F=2A$ Instantaneous forward voltage per diode              | TA=25°C  |         | 0.50  | -    |       |
|  | TA=125°C |         | 0.42  | -    |       |
| at $I_F=15A$ Instantaneous forward voltage per diode             | TA=25°C  |         | 1.05  | 1.15 |       |
|  | TA=125°C | 0.95    | -     |      |       |
| Instantaneous reverse current per diode at rated reverse voltage | TA=25°C  | $I_R$   | -     | 50   | uA    |
|  | TA=125°C |         | -     | 20   | mA    |

Note2: (1)Pulse test: 300 μs pulse width, 1 % duty cycle  
(2) Pulse test: Pulse width ≤ 40 ms

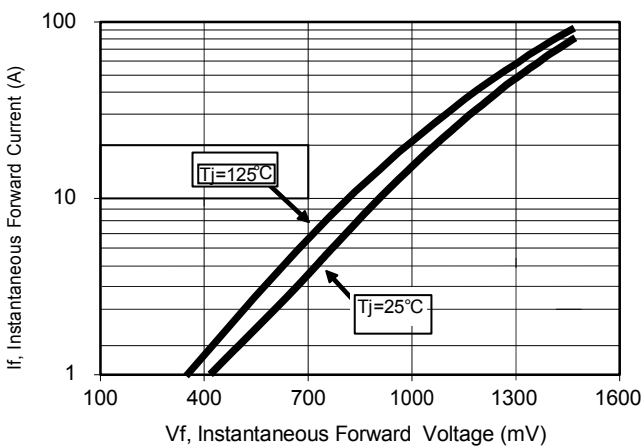
**RATINGS AND CHARACTERISTICS CURVES** (TA = 25 °C unless otherwise noted)



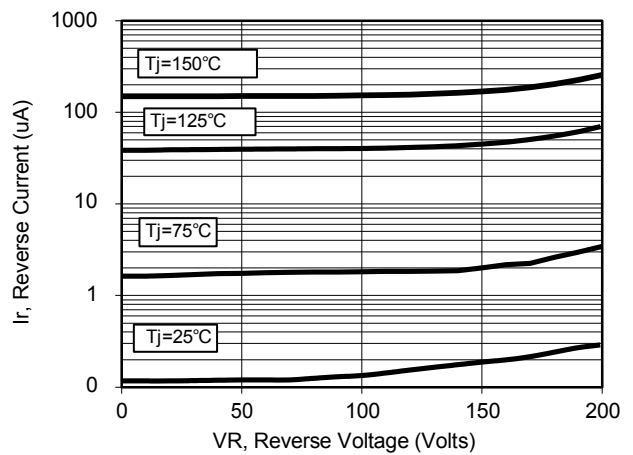
**Figure 1: Current Derating, Case**



**Figure 2: Maximum Repetitive Surge Current**



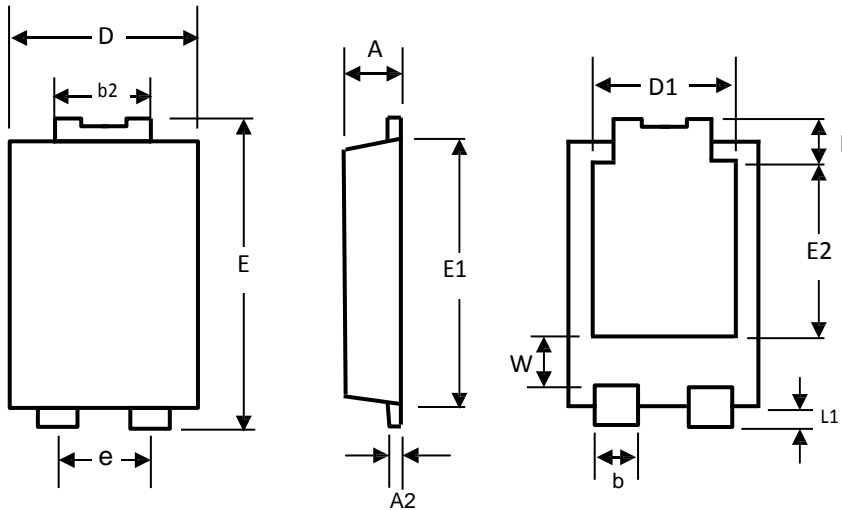
**Figure 3: Typical Forward Voltage**



**Figure 4: Typical Reverse Current**

**Package Outline TO-277**

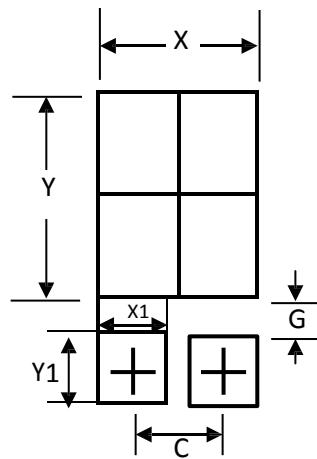
Plastic surface mounted package; 3 leads



| Dim | Min   | Max |
|-----|-------|-----|
| A   | 1.1   | 1.2 |
| A2  | 0.3   | 0.4 |
| b1  | 0.8   | 1   |
| b2  | 1.7   | 1.9 |
| D   | 3.9   | 4.1 |
| D1  | 3.054 |     |
| E   | 6.4   | 6.6 |
| e   | 1.84  |     |
| E1  | 5.3   | 5.5 |
| E2  | 3.549 |     |
| L   | 0.8   | 1   |
| L1  | 0.5   | 0.7 |
| W   | 1.1   | 1.4 |

unit:mm

**Mounting Pad Layout**



| Dim | Min |
|-----|-----|
| C   | 1.8 |
| G   | 0.9 |
| X   | 3.4 |
| X1  | 1.4 |
| Y   | 4.9 |
| Y1  | 1.4 |

unit:mm

**Summary of Packing Options**

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| TO-277  | Tape/Reel,13"reel   | 5000             | EIA-481-1         |

单击下面可查看定价，库存，交付和生命周期等信息

[>>YFW\(佑风微\)](#)