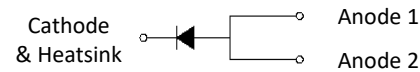


## 15A,60V Schottky Rectifiers

### FEATURES

- Excellent high temperature stability
- Low forward voltage
- Low power loss/ high efficiency
- High forward surge capability
- Ideal for automated placement
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition


**TO-277B**


### TYPICAL APPLICATIONS

Trench Schottky barrier rectifier is designed for high frequency miniature switched mode power supplies such as adapters, lighting and on-board DC/DC converters.

### MECHANICAL DATA

**Case:** TO-277B

Molding compound meets UL 94 V-0 flammability rating

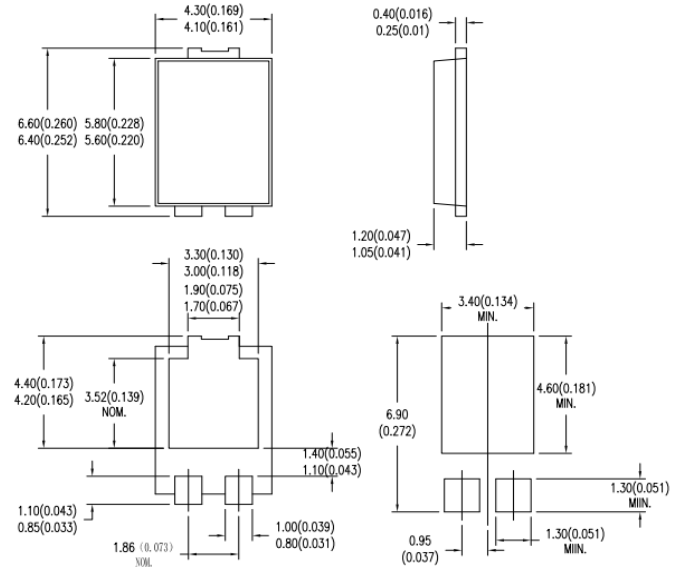
Moisture sensitivity level: level 1, per J-STD-020

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

**Polarity:** Indicated by cathode band

**Weight:** 0.095g (approximately)



| MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)  |                        |                       |                  |      |      |
|---|------------------------|-----------------------|------------------|------|------|
| PARAMETER   |                        | SYMBOL                | <b>SP1560L-A</b> |      | UNIT |
| Maximum repetitive peak reverse voltage   |                        | V <sub>RRM</sub>      | 60               |      | V    |
| Maximum average forward rectified current   |                        | I <sub>F(AV)</sub>    | 15               |      | A    |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load per diode |                        | I <sub>FSM</sub>      | 250              |      | A    |
| Maximum instantaneous forward voltage per diode (Note 1)                                      | I <sub>F</sub> = 15A   | T <sub>J</sub> = 25°C | V <sub>F</sub>   | 0.59 | V    |
| Maximum instantaneous reverse current per diode at rated reverse voltage                      | T <sub>J</sub> = 25°C  | I <sub>R</sub>        | 200              |      | μA   |
|   | T <sub>J</sub> = 125°C |                       | 2                |      | mA   |
| Typical thermal resistance  |                        | R <sub>θJL</sub>      | 11               |      | °C/W |
| Operating temperature range   |                        | T <sub>J</sub>        | - 55 to +150     |      | °C   |
| Storage temperature range   |                        | T <sub>STG</sub>      | - 55 to +150     |      | °C   |

Note 1: Pulse Test with Pulse Width=300μs, 1% Duty Cycle

RATINGS AND CHARACTERISTICS CURVES

( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

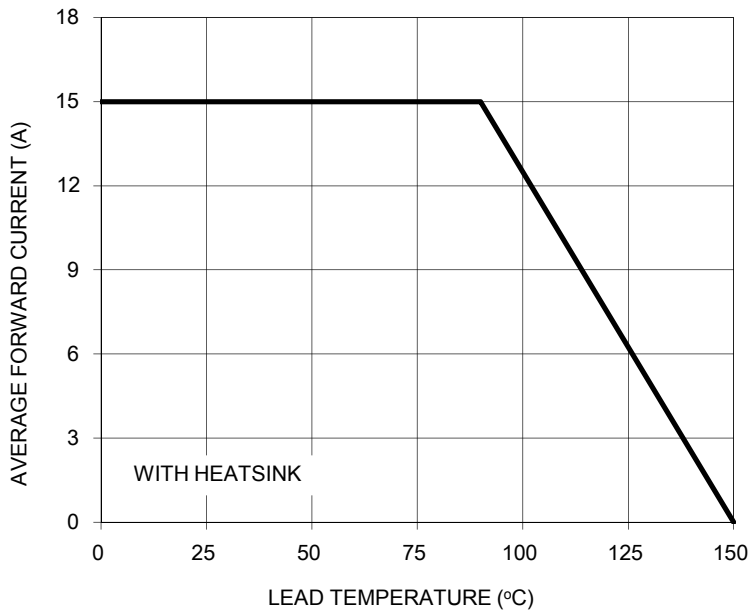


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

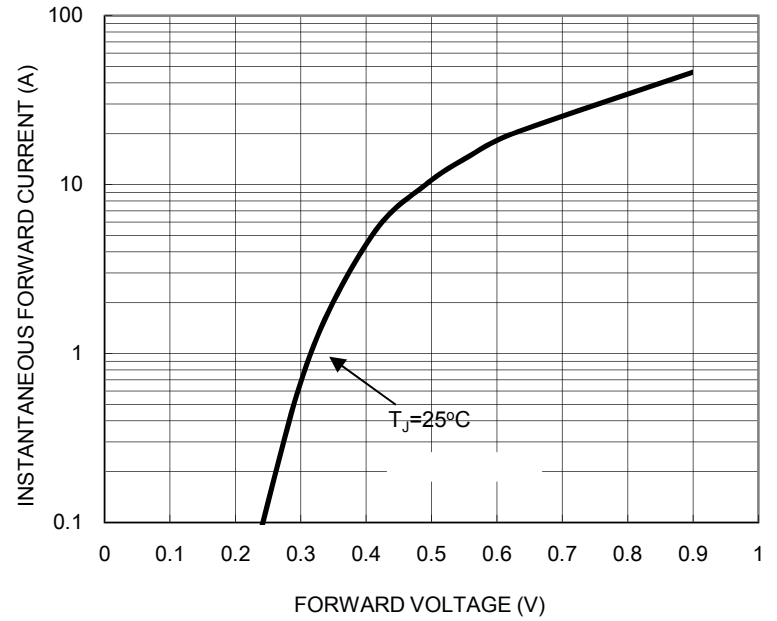


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

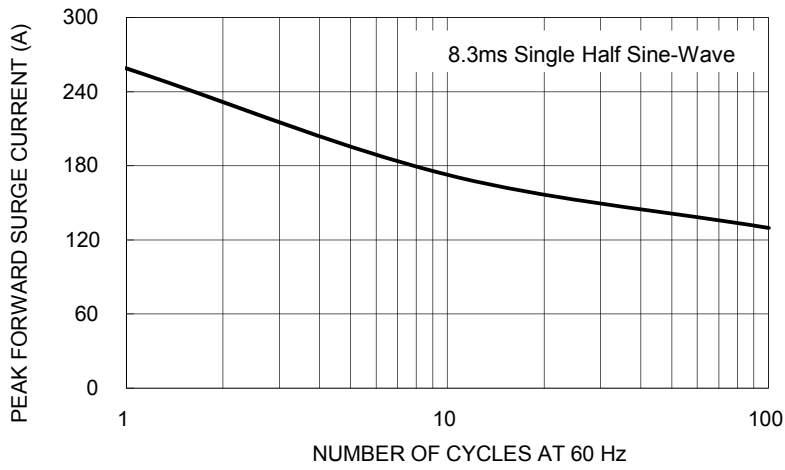


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

