

# 3L60 DO-201AD

## Trench MOS Barrier Schottky Rectifier

**DO-201AD**

**3L60**



Cathode  Anode

### Features

- Advanced trench technology
- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

### Applications

- DC/DC Converters
- AC/DC Adaptors

### Maximum ratings and electrical characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

| Parameter                                                                                    |                    |                       | Symbol                            | Limit       |      | Unit |
|----------------------------------------------------------------------------------------------|--------------------|-----------------------|-----------------------------------|-------------|------|------|
| Maximum repetitive peak reverse voltage                                                      |                    |                       | V <sub>RRM</sub>                  | 60          |      | V    |
| Maximum average forward rectified current                                                    |                    |                       | I <sub>F(AV)</sub>                | 3           |      | A    |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode |                    |                       | I <sub>FSM</sub>                  | 80          |      | A    |
| Operating junction and storage temperature range                                             |                    |                       | T <sub>J</sub> , T <sub>STG</sub> | -65 to +150 |      | °C   |
| Typical thermal resistance per diode (Mounted on FR-4 PCB)                                   |                    |                       | R <sub>θJC</sub>                  | 20          |      | °C/W |
| Instantaneous forward voltage                                                                |                    |                       | V <sub>F(1)</sub>                 | TYP.        | MAX. | V    |
|                                                                                              | I <sub>F</sub> =3A | T <sub>J</sub> =25°C  |                                   | 0.50        | -    |      |
|                                                                                              | I <sub>F</sub> =3A | T <sub>J</sub> =125°C |                                   | 0.34        | -    |      |
| Instantaneous reverse current per diode at rated reverse voltage                             |                    | T <sub>J</sub> =25°C  | I <sub>R(2)</sub>                 | -           | 0.2  | mA   |
|                                                                                              |                    | T <sub>J</sub> =125°C |                                   | -           | 10   | mA   |

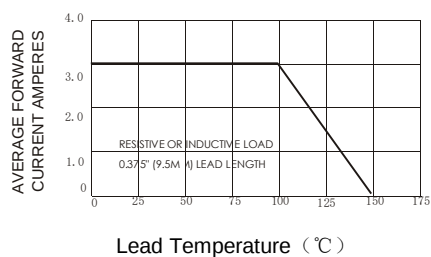
Notes:

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

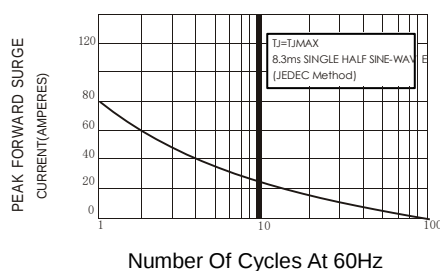
(2) Pulse test: Pulse width ≤ 40 ms

## RATINGS AND CHARACTERISTICS CURVES

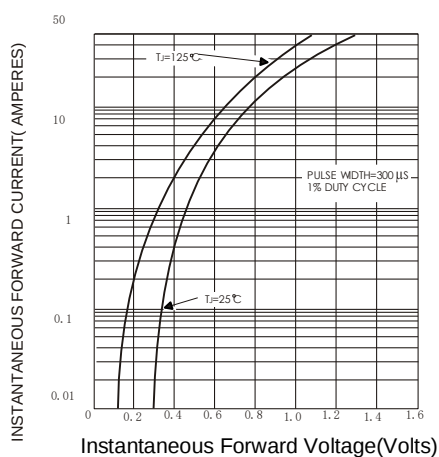
Forward Current Derating Curve



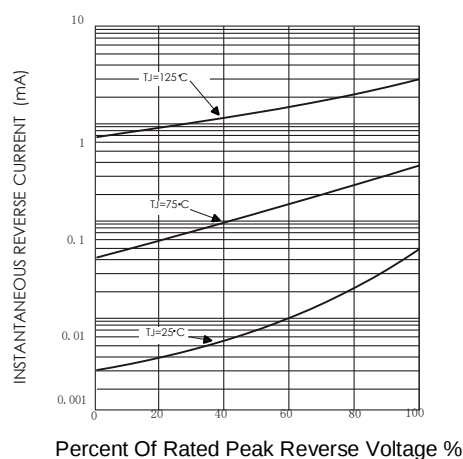
Maximum Non-repetitive Peak Forward Surge Current



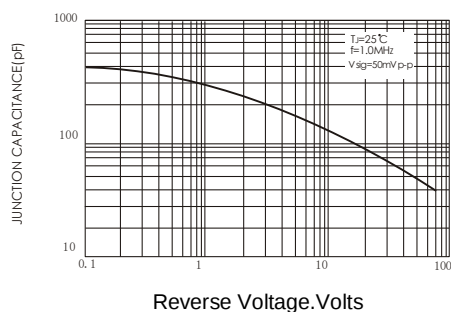
Typical Instantaneous Forward Characteristics



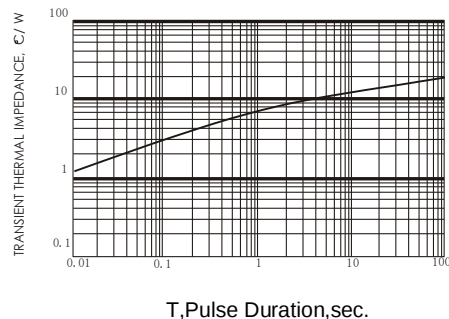
Typical Reverse Characteristics



Typical Juncyion Capacitance



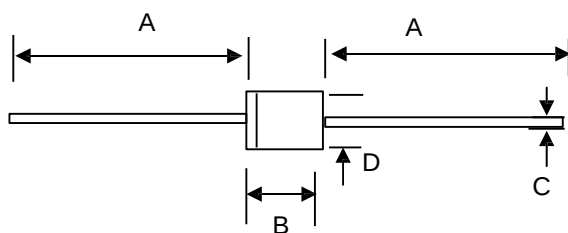
Typical Transient Thermal Impedance



# 3L60 DO-201AD

## PACKAGE OUTLINE

### DO-201AD



| DO-201AD             |      |      |
|----------------------|------|------|
| Dim.                 | Min. | Max. |
| A                    | 25.4 | -    |
| B                    | 7.3  | 9.5  |
| C                    | 1.2  | 1.3  |
| D                    | 4.8  | 5.3  |
| All Dimensions in mm |      |      |