

8L45 DO-201AD

Trench MOS Barrier Schottky Rectifier

DO-201AD

8L45



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_J = 25°C unless otherwise noted)

| Parameter | | Symbol | Limit | | Unit |
|--|-----------------------|-----------------------------------|-------------|------|------|
| Maximum repetitive peak reverse voltage | | V _{RRM} | 45 | | V |
| Maximum average forward rectified current | | I _{F(AV)} | 8 | | A |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load per diode | | I _{FSM} | 150 | | A |
| Operating junction and storage temperature range | | T _J , T _{STG} | -65 to +150 | | °C |
| Typical thermal resistance per diode (Mounted on FR-4 PCB) | | R _{θJC} | 22 | | °C/W |
| Instantaneous forward voltage | I _F =2A | V _{F(1)} | TYP. | MAX. | V |
| | I _F =2A | | 0.36 | - | |
| | I _F =8A | | 0.25 | - | |
| | I _F =8A | | - | 0.55 | |
| Instantaneous reverse current per diode at rated reverse voltage | T _J =25°C | I _{R(2)} | - | 60 | uA |
| | T _J =125°C | | - | 20 | mA |

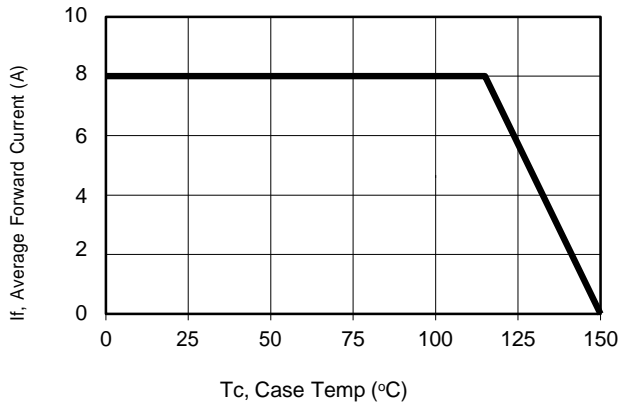
Notes:

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

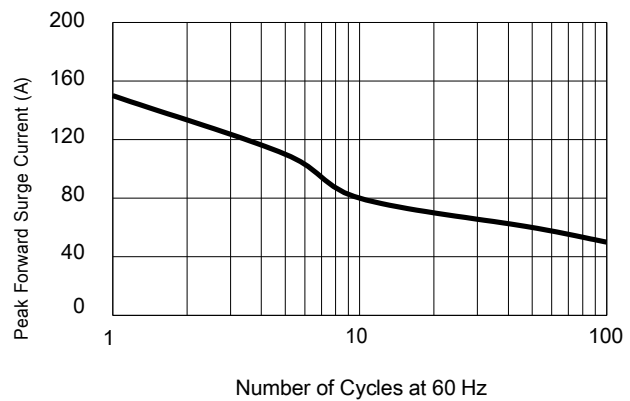
(2) Pulse test: Pulse width ≦ 40 ms

8L45 DO-201AD

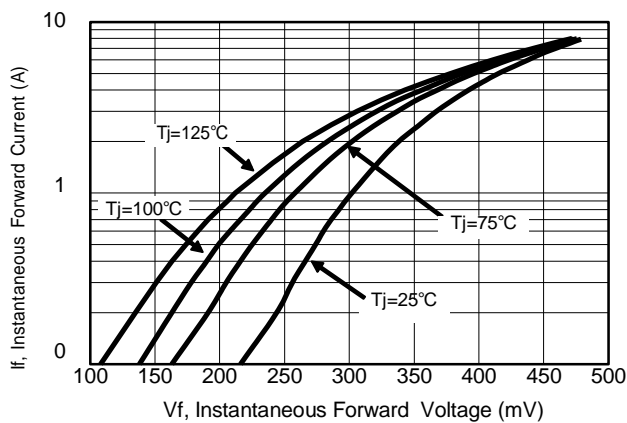
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



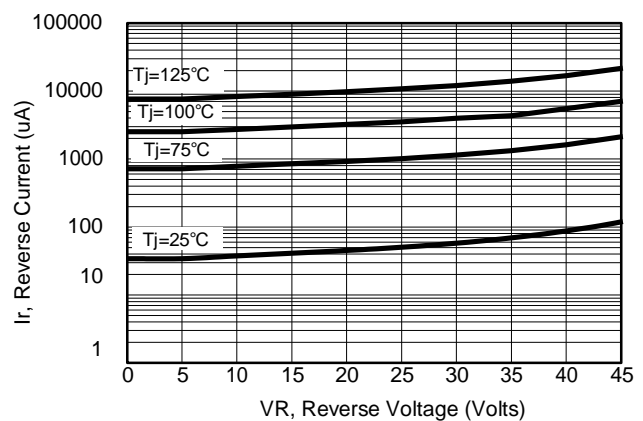
Current Derating, Case



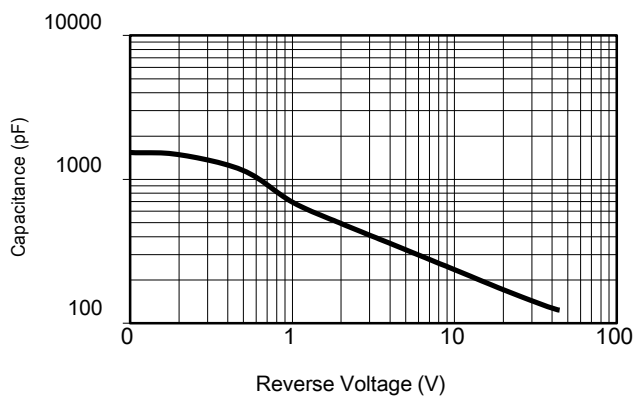
Maximum Repetitive Surge Current



Typical Forward Voltage



Typical Reverse Current

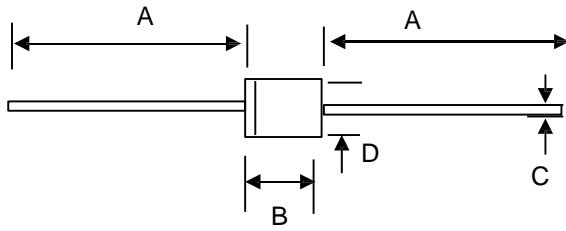


Typical Junction Capacitance

8L45 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 | | |