

REVERSE VOLTAGE 50V~1000V FORWARD CURRENT 1.0AMP SURFACE MOUNT RECTIFIER

FEATURES

- Glass passivated standard rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Meets environmental standard MIL-S-19500
- Meets MSL level 1, per J-STD-020
- Solder dip 275 °C, 10 s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



DO-213AA (GL34)

TYPICAL APPLICATIONS

For use in general purpose rectification of lighting, power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.

MECHANICAL DATA

- **Case:** DO-213AA, molded epoxy over glass body Epoxy meets UL 94V-0 flammability rating
- **Terminals:** Matte tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity :** Two bands indicate cathode end - 1st band denotes device type and cathode, white ring denotes cathode and general standard rectifier family, and 2nd band denotes repetitive peak reverse voltage rating

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | GL1A | GL1B | GL1D | GL1G | GL1J | GL1K | GL1M | UNITS |
|---|-------------|------|------|------|------|------|------|-------|
| Maximum Repetitive Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current See Fig. 1 | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine- wave superimposed on rated load (JEDEC method) | 25 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 1.0A | 1.10 | | | | | | | V |
| Maximum DC Reverse Current Ta=25 °C | 5.0 | | | | | | | uA |
| at Rated DC Blocking Voltage Ta=125 °C | 50 | | | | | | | |
| Typical Junction Capacitance (Note1) | 10 | | | | | | | pF |
| Operating Temperature Range Tj | - 55 ~ +150 | | | | | | | °C |
| Storage Temperature Range Tstg | - 55 ~ +150 | | | | | | | °C |

NOTES

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



Ratings and Characteristic Curves

(TA = 25°C unless otherwise noted)

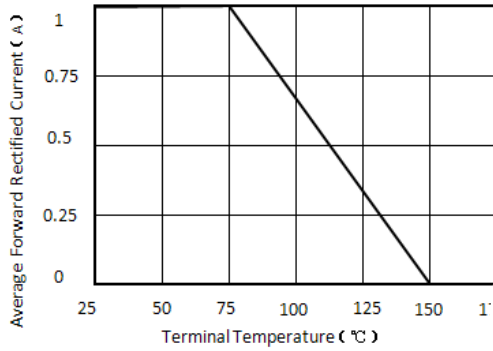


Figure 1. Forward Current Derating Curve

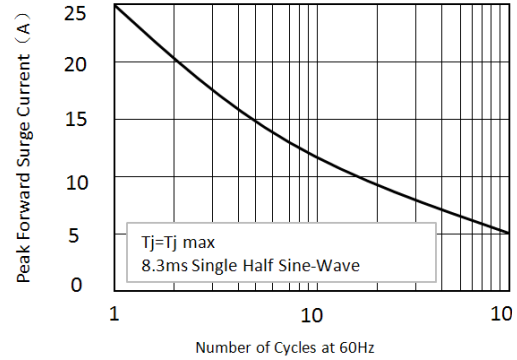


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

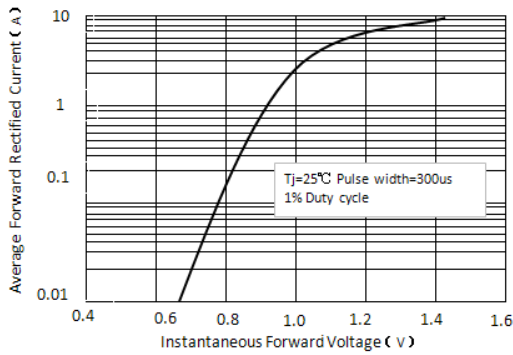


Figure 3. Typical Instantaneous Forward Characteristics

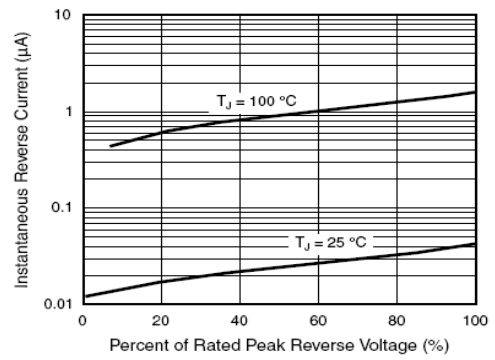


Figure 4. Typical Reverse Characteristics

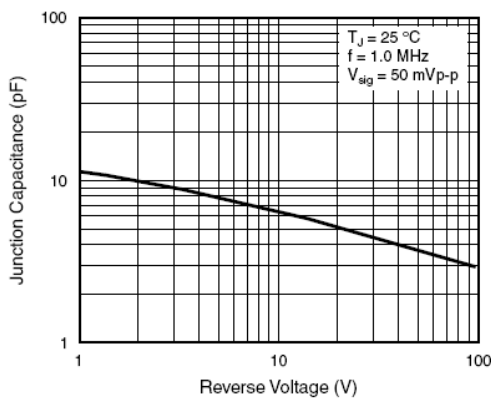


Figure 5. Typical Junction Capacitance

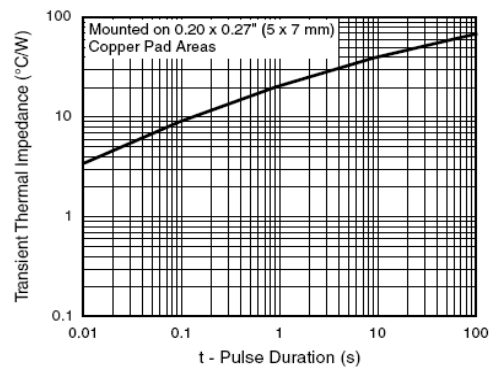
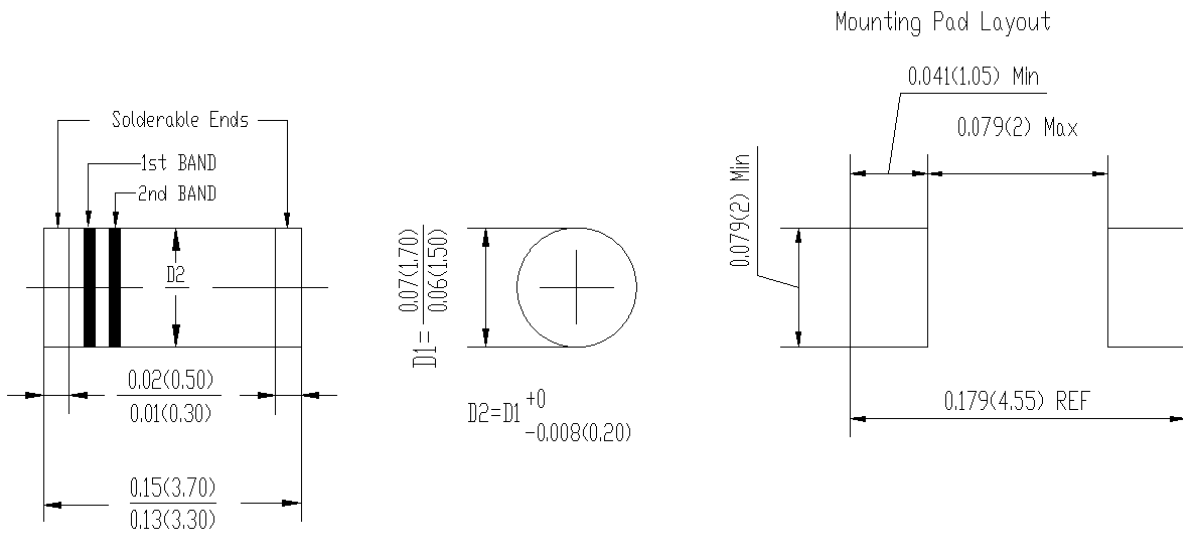


Figure 6. Typical Transient Thermal Impedance

Package Dimensions in inches and (millimeters)

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1st band denotes type and polarity 2nd band denotes voltage type