

# RL201 THRU RL207

## 2.0 AMPS. SILICON RECTIFIERS

**Voltage Range**  
50 to 1000 Volts  
**Current**  
2.0 Amperes

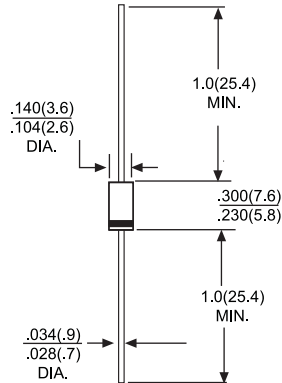
### DO-15

#### Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

#### Mechanical Data

- Cases: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:  
250°C/10 seconds/.375"(.9.5mm) lead lengths at 5 lbs.(2.3kg) tension
- Weight: 0.40 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 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                                                                                                 |                    | RL201       | RL202 | RL203 | RL204 | RL205 | RL206 | RL207 | UNITS    |
|-------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------|-------|-------|-------|-------|-------|----------|
| Maximum Repetitive Peak Reverse Voltage                                                                     | V <sub>RRM</sub>   | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V        |
| Maximum RMS Voltage                                                                                         | V <sub>RMS</sub>   | 35          | 70    | 140   | 280   | 420   | 560   | 700   | V        |
| Maximum DC Blocking Voltage                                                                                 | V <sub>DC</sub>    | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V        |
| Maximum Average Forward Rectified Current<br>.375"(9.5mm) Lead Length @T <sub>A</sub> = 75°C                | I <sub>F(AV)</sub> | 2.0         |       |       |       |       |       |       | A        |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated Load<br>(JEDEC method)    | I <sub>FSM</sub>   | 60          |       |       |       |       |       |       | A        |
| Maximum Instantaneous Forward Voltage<br>@2.0A                                                              | V <sub>F</sub>     | 1.0         |       |       |       |       |       |       | V        |
| Maximun DC Reverse Current @ T <sub>A</sub> = 25°C<br>at Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C | I <sub>R</sub>     | 5.0<br>50   |       |       |       |       |       |       | uA<br>uA |
| Maximum Full Load Reverse Current, Full<br>Cycle Average .375"(9.5mm) Lead Length<br>@T <sub>A</sub> =75°C  | I <sub>R</sub>     | 30          |       |       |       |       |       |       | uA       |
| Typical Junction Capacitance (Note 1)                                                                       | C <sub>J</sub>     | 30          |       |       |       |       |       |       | pF       |
| Typical Thermal Resistance (Note 2)                                                                         | R <sub>θJA</sub>   | 50          |       |       |       |       |       |       | °C/W     |
| Operating Temperature Range                                                                                 | T <sub>J</sub>     | -55 to +125 |       |       |       |       |       |       | °C       |
| Storage Temperature Range                                                                                   | T <sub>STG</sub>   | -55 to +150 |       |       |       |       |       |       | °C       |

NOTES: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.  
2. Thermal Resistance from Junction to Ambient .375"(9.5mm) Lead Length.

# RATING AND CHARACTERISTIC CURVES RL201 THRU RL207

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

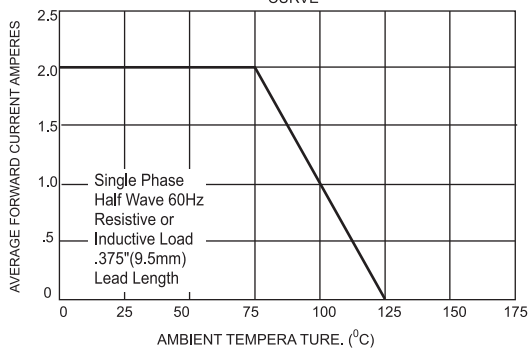


FIG.2- TYPICAL FORWARD CHARACTERISTICS

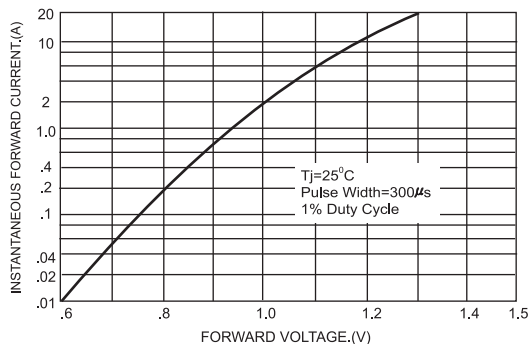


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

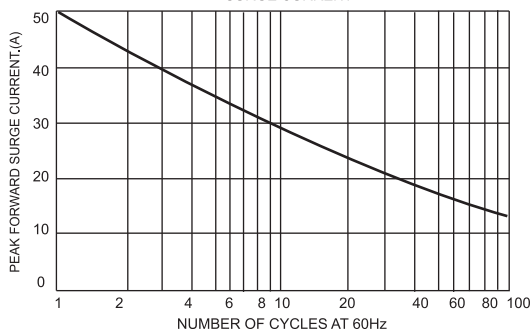


FIG.4-TYPICAL REVERSE CHARACTERISTICS

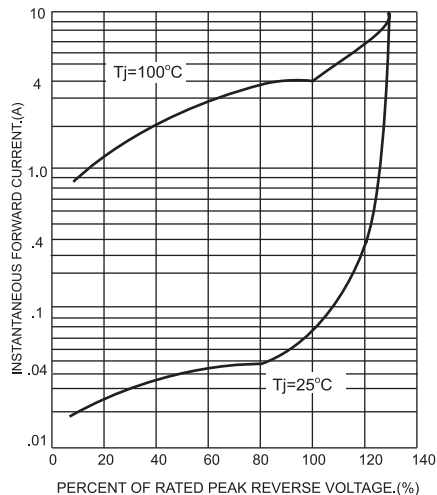


FIG.5- TYPICAL JUNCTION CAPACITANCE

