

**SILICON RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes**

**FEATURES**

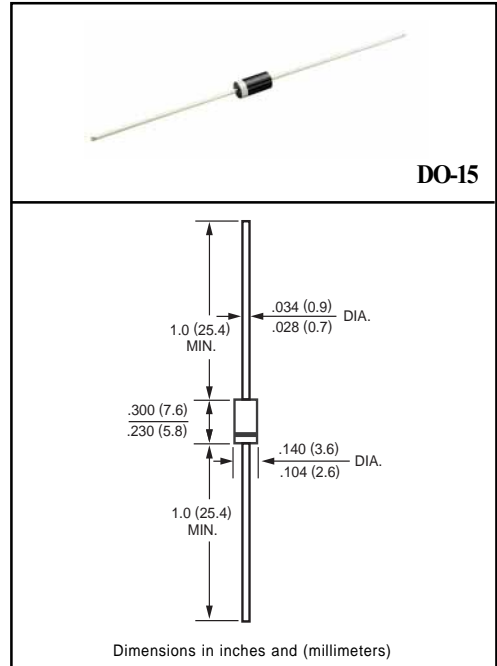
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-0
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 0.38 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

| RATINGS  | SYMBOL   | RL201        | RL202 | RL203 | RL204 | RL205 | RL206 | RL207 | UNITS |
|--|----------|--------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage   | VRRM     | 50           | 100   | 200   | 400   | 600   | 800   | 1000  | Volts |
| Maximum RMS Voltage  | VRMS     | 35           | 70    | 140   | 280   | 420   | 560   | 700   | Volts |
| Maximum DC Blocking Voltage  | Vdc      | 50           | 100   | 200   | 400   | 600   | 800   | 1000  | Volts |
| Maximum Average Forward Rectified Current at TA = 75°C   | Io       | 2.0          |       |       |       |       |       |       | Amps  |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM     | 70           |       |       |       |       |       |       | Amps  |
| Typical Junction Capacitance (Note)  | CJ       | 20           |       |       |       |       |       |       | pF    |
| Typical Thermal Resistance   | R θJA    | 40           |       |       |       |       |       |       | °C/W  |
| Operating and Storage Temperature Range  | TJ, TSTG | -55 to + 150 |       |       |       |       |       |       | °C    |

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS  | SYMBOL       | RL201 | RL202 | RL203 | RL204 | RL205 | RL206 | RL207 | UNITS |
|--|--------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Instantaneous Forward Voltage at 2.0A DC   | VF           | 1.1   |       |       |       |       |       |       | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage                                      | @ TA = 25°C  | 5.0   |       |       |       |       |       |       | uAmps |
|  | @ TA = 100°C | 50    |       |       |       |       |       |       |       |
| Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at TL = 75°C | IR           | 30    |       |       |       |       |       |       | uAmps |

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

# RATING AND CHARACTERISTIC CURVES ( RL201 THRU RL207 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

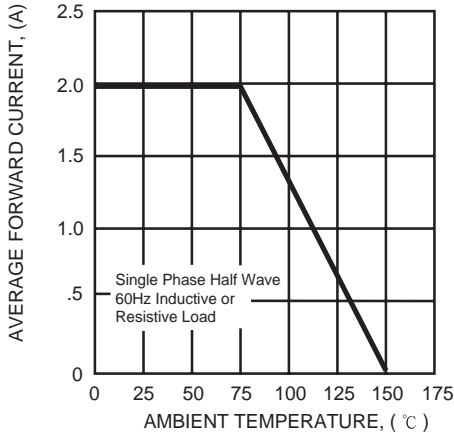


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

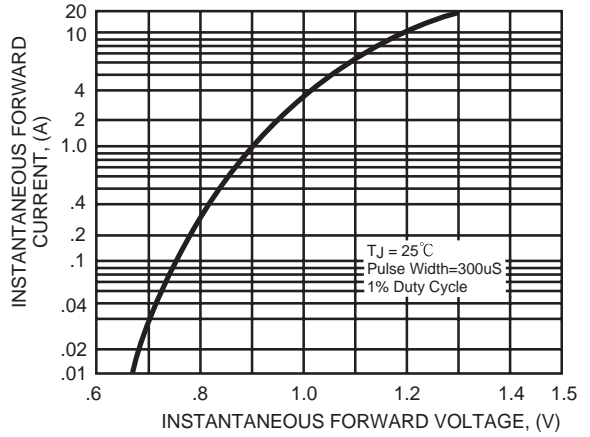


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

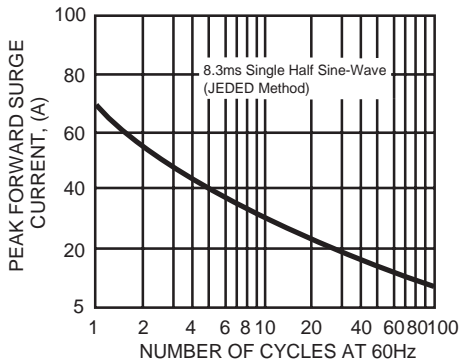


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

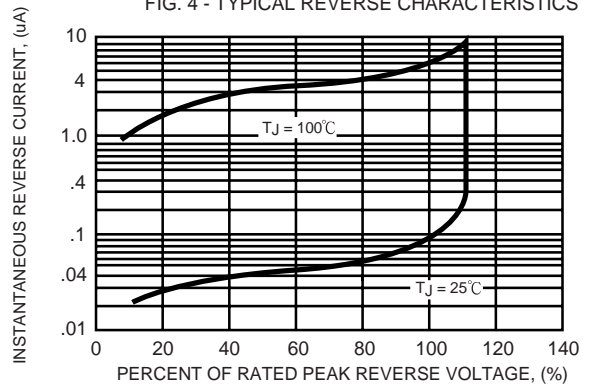


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

