# RL201-RL207

# **SEMICONDUCTOR**

# 2.0A SILICON RECTIFIER

# Data Sheet 2550 Rev.—

### **Features**

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

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# **Mechanical Data**

Case: Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208 Polarity: Cathode Band

Weight: 0.40 grams (approx.)

Mounting Position: Any

Marking: Type Number

| DO-15                      |             |             |  |  |  |  |  |
|----------------------------|-------------|-------------|--|--|--|--|--|
| Dim                        | Min         | Max         |  |  |  |  |  |
| Α                          | 1.000(25.4) | _           |  |  |  |  |  |
| В                          | 0.217(5.50) | 0.300(7.62) |  |  |  |  |  |
| С                          | 0.028(0.71) | 0.034(0.86) |  |  |  |  |  |
| D                          | 0.102(2.60) | 0.142(3.60) |  |  |  |  |  |
| All Dimensions in inch(mm) |             |             |  |  |  |  |  |

# Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

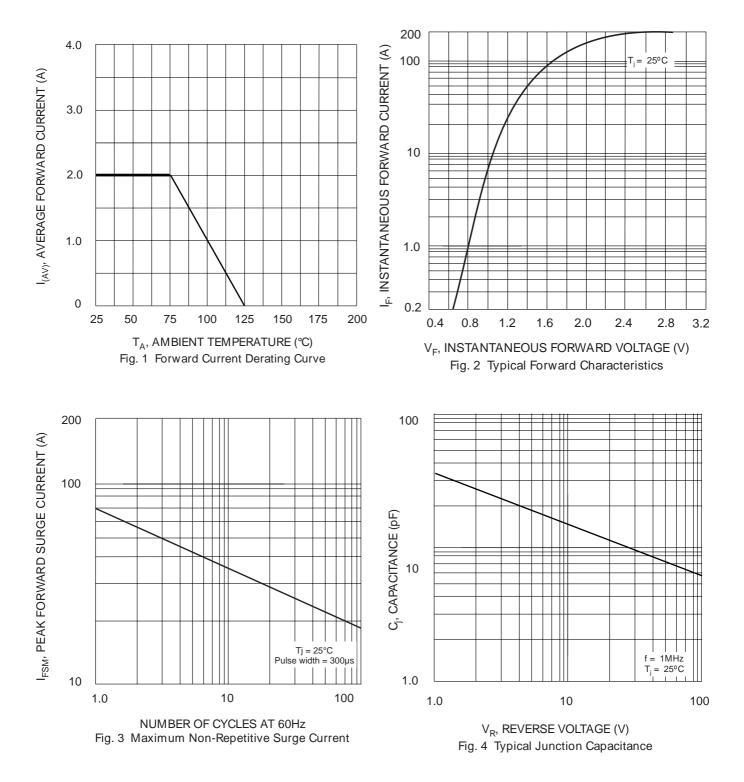
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic  | Symbol             | RL201       | RL202 | RL203 | RL204 | RL205 | RL206 | RL207 | Unit |
|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | Vrrm<br>Vrwm<br>Vr | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V    |
| RMS Reverse Voltage   | VR(RMS)            | 35          | 70    | 140   | 280   | 420   | 560   | 700   | V    |
| Average Rectified Output Current (Note 1) @T <sub>A</sub> = 75°C  | lo                 | 2.0         |       |       |       |       |       |       | Α    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | İFSM               | 70          |       |       |       |       |       |       | Α    |
| Forward Voltage @I <sub>F</sub> = 2.0A  | VFM                | 1.0         |       |       |       |       |       |       | V    |
| Peak Reverse Current @T <sub>A</sub> = 25°C<br>At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C                   | lгм                | 5.0<br>50   |       |       |       |       |       |       | μΑ   |
| Typical Junction Capacitance (Note 2)   | Cj                 | 20          |       |       |       |       |       |       | pF   |
| Typical Thermal Resistance Junction to Ambient (Note 1)   | $R_{	heta}$ JA     | 40          |       |       |       |       |       | K/W   |      |
| Operating Temperature Range   | Tj                 | -65 to +125 |       |       |       |       |       | °C    |      |
| Storage Temperature Range   | Тѕтс               | -65 to +150 |       |       |       |       |       |       | °C   |

# \*Glass passivated forms are available upon request

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.





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