

# SHANGHAI SUNRISE ELECTRONICS CO., LTD.

## RL151G THRU RL157G

**GLASS PASSIVATED** JUNCTION RECTIFIER

**TECHNICAL SPECIFICATION** 

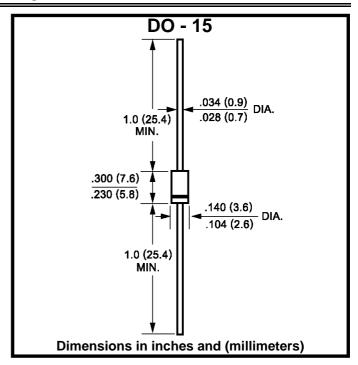
VOLTAGE: 50 TO 1000V CURRENT: 1.5A

#### **FEATURES**

- Molded case feature for auto insertion
- Glass passivated chip
- High current capability
- Low leakage current
- High surge capability
- High temperature soldering guaranteed: 250°C/10sec/0.375"(9.5mm) lead length at 5 lbs tension

#### MECHANICAL DATA

- Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-O recognized flame retardant epoxy
- Polarity: Color band denotes cathode
- Mounting position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

| RATINGS  | SYMBOL              | RL<br>151G  | RL<br>152G | RL<br>153G | RL<br>154G | RL<br>155G | RL<br>156G | RL<br>157G | UNITS |
|--|---------------------|-------------|------------|------------|------------|------------|------------|------------|-------|
| Maximum Repetitive Peak Reverse Voltage              | $V_{RRM}$           | 50          | 100        | 200        | 400        | 600        | 800        | 1000       | V     |
| Maximum RMS Voltage                                  | $V_{RMS}$           | 35          | 70         | 140        | 280        | 420        | 560        | 700        | V     |
| Maximum DC Blocking Voltage                          | $V_{DC}$            | 50          | 100        | 200        | 400        | 600        | 800        | 1000       | V     |
| Maximum Average Forward Rectified Current            |                     | 1.5         |            |            |            |            |            |            | Α     |
| (9.5mm lead length, at T <sub>a</sub> =75°C)         | I <sub>F(AV)</sub>  |             |            |            |            |            |            |            |       |
| Peak Forward Surge Current (8.3ms single             | _                   | 60.0        |            |            |            |            |            |            | Α     |
| half sine-wave superimposed on rated load)           | I <sub>FSM</sub>    |             |            |            |            |            |            |            | A     |
| Maximum Instantaneous Forward Voltage                | $V_{F}$             | 1.1         |            |            |            |            |            |            | V     |
| (at rated forward current)                           | v F                 |             |            |            |            |            |            |            |       |
| Maximum DC Reverse Current T <sub>a</sub> =25°C      | ı                   | 5.0         |            |            |            |            |            |            | μΑ    |
| (at rated DC blocking voltage) T <sub>a</sub> =100°C | I <sub>R</sub>      | 50          |            |            |            |            |            |            | μΑ    |
| Typical Junction Capacitance (Note 1)                | $C_{J}$             | 20.0        |            |            |            |            |            |            | pF    |
| Typical Thermal Resistance (Note 2)                  | R <sub>θ</sub> (ja) | 40          |            |            |            |            |            |            | °C/W  |
| Storage and Operation Junction Temperature           | $T_{STG},T_{J}$     | -65 to +150 |            |            |            |            |            | °C         |       |
| Note:  |                     | ,           | ,          |            |            |            | ,          | ,          | , i   |

- Note:
- 1.Measured at 1.0 MHz and applied voltage of 4.0V<sub>dc</sub>
- 2.Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C. board mounted