

### **Features**

- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- · Glass Passivated Junction
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 25°C/W Junction to Lead

| MCC<br>Part Number | Device<br>Marking | Maximum<br>Recurrent<br>Peak Reverse<br>Voltage | Maximum<br>RMS Voltage | Maximum DC<br>Blocking<br>Voltage |
|--------------------|-------------------|---|------------------------|-----------------------------------|
| RL251GP            | RL251GP           | 50V   | 35V                    | 50V                               |
| RL252GP            | RL252GP           | 100V  | 70V                    | 100V                              |
| RL253GP            | RL253GP           | 200V  | 140V                   | 200V                              |
| RL254GP            | RL254GP           | 400V  | 280V                   | 400V                              |
| RL255GP            | RL255GP           | 600V  | 420V                   | 600V                              |
| RL256GP            | RL256GP           | 800V  | 560V                   | 800V                              |
| RL257GP            | RL257GP           | 1000V   | 700V                   | 1000V                             |

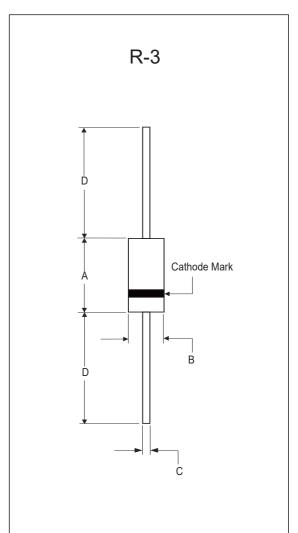
# Electrical Characteristics @ 25°C Unless Otherwise Specified

|   | _                  |                    | •  |  |
|---|--------------------|--------------------|--|--|
| Average Forward Current                                       | I <sub>F(AV)</sub> | 2.5A               | T <sub>A</sub> = 75°C                          |  |
| Peak Forward Surge<br>Current                                 | I <sub>FSM</sub>   | 70A<br>200A        | 8.3ms,Half Sine Wave<br>1ms,Square Wave        |  |
| Maximum<br>Instantaneous<br>Forward Voltage                   | V <sub>F</sub>     | 1.1V               | I <sub>F</sub> =2.5A;<br>T <sub>J</sub> =25°C* |  |
| Maximum DC Reverse<br>Current At Rated DC<br>Blocking Voltage | I <sub>R</sub>     | 5.0μA<br>50μA      | T <sub>J</sub> =25°C;<br>T <sub>J</sub> =100°C |  |
| Typical Junction<br>Capacitance                               | С                  | 40pF               | Measured at 1.0MHz<br>V <sub>R</sub> =4.0V     |  |
| Rating for Fusing   | l²t                | 20A <sup>2</sup> S | 1ms≤t<8.3ms                                    |  |

<sup>\*</sup>Pulse Test: Pulse Width 300  $\mu$ sec, Duty Cycle 1%

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

# 2.5 Amp Glass Passivated Rectifier 50 to 1000 Volts



| DIMENSIONS |       |       |       |      |      |  |
|------------|-------|-------|-------|------|------|--|
| DIM INC    |       | HES   | MM    |      | NOTE |  |
| Dilvi      | MIN   | MAX   | MIN   | MAX  | NOTE |  |
| Α          |       | 0.160 |       | 4.10 |      |  |
| В          |       | 0.160 |       | 4.10 |      |  |
| С          | 0.040 | 0.042 | 1.01  | 1.07 |      |  |
| D          | 1.000 |       | 25.40 |      |      |  |



# **Curve Characteristics**

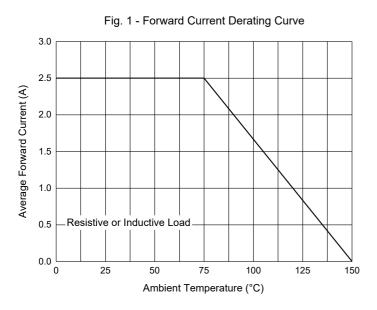
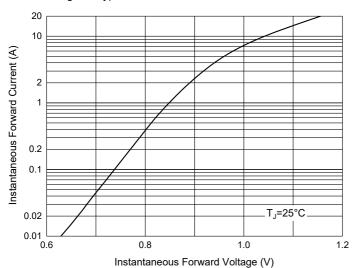


Fig. 3 - Typical Instantaneous Forward Characteristics



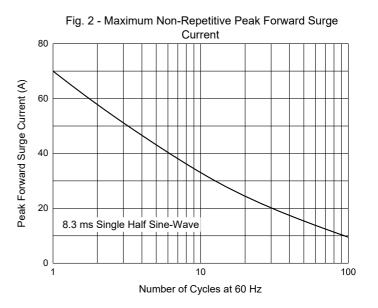
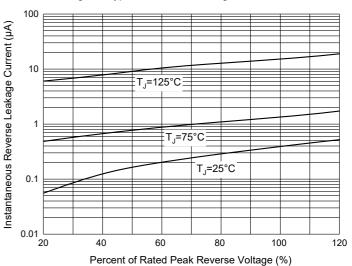


Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

| Device         | Packing                        |  |  |
|----------------|--------------------------------|--|--|
| Part Number-TP | Tape&Reel:3Kpcs/Reel           |  |  |
| Part Number-BP | Bulk: 500Pcs/Box,25KPcs/Carton |  |  |

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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