

Glass Passivated Junction Rectifiers

R-1



Features

- ROHS compliant
- Glass passivated chip
- High forward surge capability
- Meet MSL level 1, per J-STD-020 LF maximum peak of 250 °C
- Solder dip 260 °C / 40S
- Component in accordance to ROHS 2002/95/EC and WEEE 2002/96/WC
- UL recognition, file number E342874

Applications

Ideal for ac-to-dc bridge full wave rectification suck as SMPS, home applianes, office equipment, indusrial automation applicatios

Mechanical data

Case: R-1

- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.
- Mounting Torque:10cm-kg(8.8 inches-lbs)max.
- Recommended Torque:5.7 cm-kg(5 inches-lbs)

Primary characteristics 1A $I_{F(AV)}$ 50V to 1000V V_{RRM} I_{FSM} 30A I_{RM} 5uA V_{FM} at $I_F=1A$ 1.1V T_J max. 150 °C

| Maximum rating (Ta=25°C unless otherwise noted) | | | | | | | | | | |
|---|--|------------------|--------------------|-----|-----|-----|----------------|----------------------------------|------|--------|
| Daramatar | | C | R-1 | | | | | | | l lmi4 |
| Parameter | | Sym | 1G1 | 1G2 | 1G3 | 1G4 | 1G5 | 1 G6 800 560 800 | 1G7 | Unit |
| Max. repetitive peak reverse voltage | | V_{RRM} | 50 | 100 | 200 | 400 | 600 800 1000 | | V | |
| Max. RMS reverse voltage | | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Max. DC blocking voltage | | V_{DC} | 50 | 100 | 200 | 400 | 0 600 800 1000 | | 1000 | V |
| Max. average forward current | average forward current | | 1 | | | | | Α | | |
| Non-repetitive peak forward surge current | | I _{FSM} | 30 | | | | | | | |
| 8.3ms single half-sine-wave | | | | | | | | | Α | |
| Max. instantaneous forward voltage di | stantaneous forward voltage drop per diode | | 1.1(1A) | | | | | V | | |
| Max. instantaneous reverse current | Ta=25 °C | | 5 | | | | | | μΑ | |
| at rated DC blocking voltage | Ta=125 °C | I _{RM} | 100 | | | | | | | μΑ |
| Operating junction temperature | | TJ | -55 ~ + 150 | | | | | °C | | |
| Storage temperature | | Tstg | -55 ~ + 150 | | | | | °C | | |
| Typical junction capacitance (Note 1) | | Сл | 15 | | | | | pF | | |

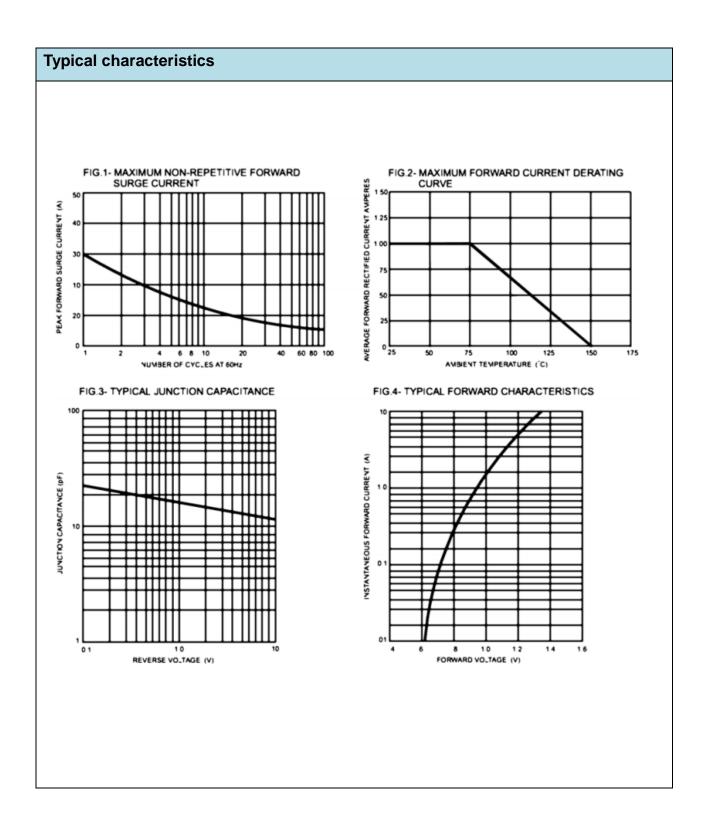
Notes:

1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C



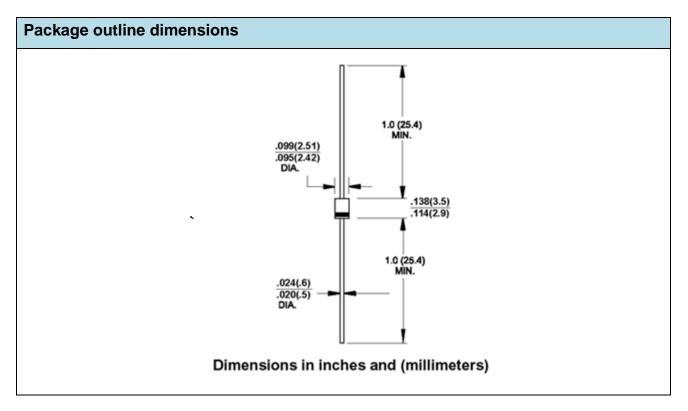
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| Ordering information (Example) | | | | | | | | |
|--------------------------------|-----------------|------------------------|---------------|---------------|--|--|--|--|
| PREFERRED | UNIT WEIGHT (g) | PREFERRED PACKAGE CODE | BASE QUANTITY | DELIVERY MODE | | | | |
| 1G7 | | | | | | | | |





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