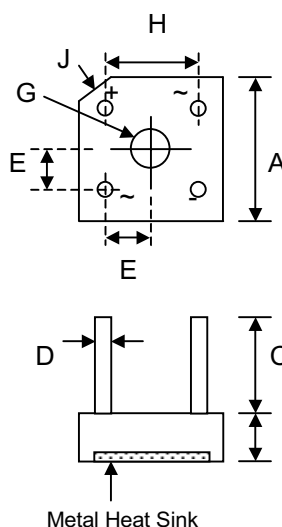


Features

- Diffused Junction
- High Current Capability
- High Case Dielectric Strength
- High Surge Current Capability
- Ideal for Printed Circuit Board Application
- Plastic Material has Underwriters Laboratory Flammability Classification 94V-O
- UL Recognized File # E223064
- Green Products in Compliance with the RoHS Directive

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Marked on Body
- Weight: 5.4 grams (approx.)
- Mounting Position: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Marking: Type Number



| MP-10 | | | | |
|-------|---------------------|-------|----------------------|-------|
| Dim | Min | Max | Min | Max |
| A | 14.73 | 15.75 | 0.580 | 0.620 |
| B | 5.80 | 6.90 | 0.228 | 0.272 |
| C | 19.00 | — | 0.748 | — |
| D | 1.00 Ø Typical | | 0.039 Ø Typical | |
| E | 5.11 | 6.14 | 0.201 | 0.242 |
| G | Hole for #6 screw | | | |
| | 3.60 | 4.00 | 0.142 | 0.157 |
| H | 10.30 | 11.30 | 0.406 | 0.445 |
| J | 2.38 X 45°C Typical | | 0.094 X 45°C Typical | |
| | In mm | | In inch | |

Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

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

| Characteristic | Symbol | MP | MP | MP | MP | MP | MP | MP | Unit |
|---|-----------------------------------|-------------|--------|--------|--------|--------|--------|--------|------------------|
| | | 1000-G | 1001-G | 1002-G | 1004-G | 1006-G | 1008-G | 1010-G | |
| Peak Repetitive Reverse Voltage | V _{RRM} | | | | | | | | V |
| Working Peak Reverse Voltage | V _{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | |
| DC Blocking Voltage | V _R | | | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1) @ _{T_A} = 50°C | I _o | 10 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 200 | | | | | | | A |
| Forward Voltage (per element) @ _{I_F} = 5.0A | V _{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @ _{T_C} = 25°C | I _R | 10 | | | | | | | µA |
| At Rated DC Blocking Voltage @ _{T_C} = 100°C | | 1.0 | | | | | | | |
| I ² t Rating for Fusing (t<8.3ms) (Note 2) | I ² _t | 64 | | | | | | | A ² s |
| Typical Junction Capacitance (Note 3) | C _j | 110 | | | | | | | pF |
| Typical Thermal Resistance (Note 4) | R _{θJC} | 7.5 | | | | | | | K/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +125 | | | | | | | °C |

- Note: 1. Mounted on heatsink.
2. Non-repetitive, for t > 1ms and < 8.3ms.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
4. Thermal resistance junction to case per element.

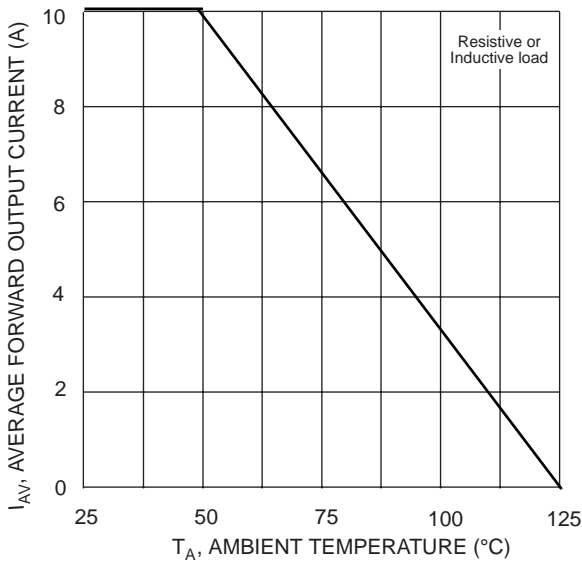


Fig. 1 Forward Current Derating Curve

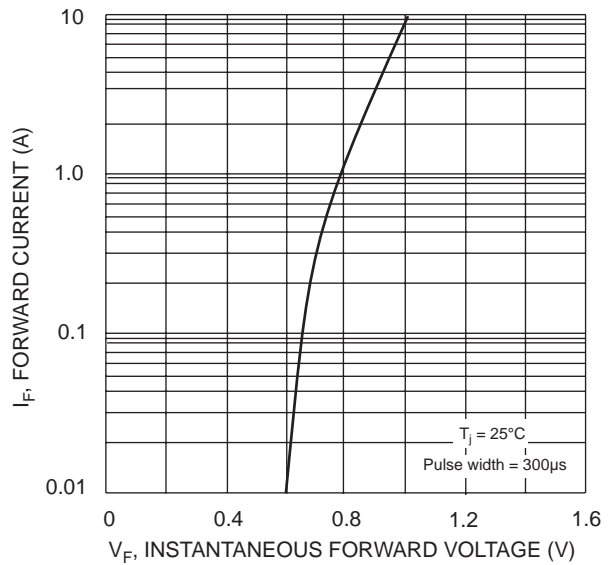


Fig. 2 Typical Forward Characteristics, per element

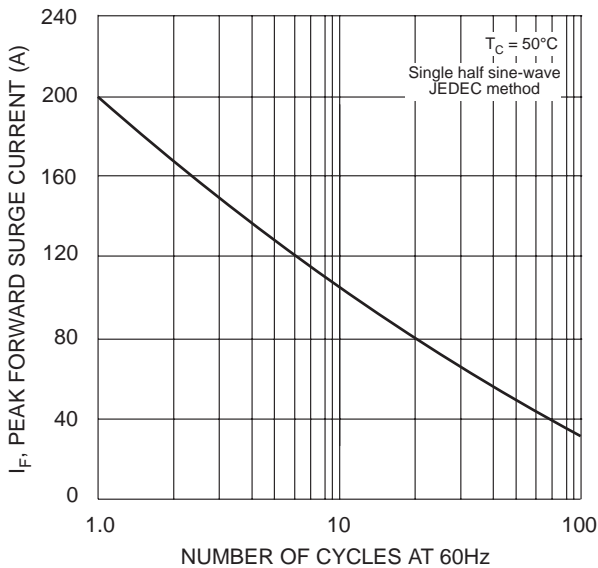


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

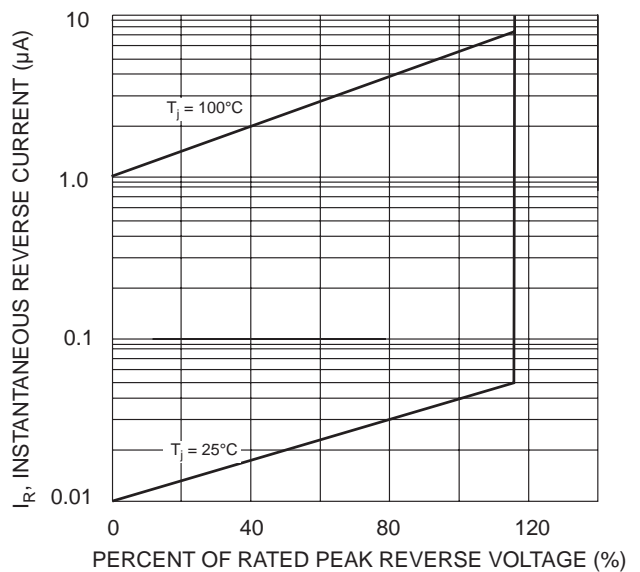


Fig. 4 Typical Reverse Characteristics, per element

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