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|  | E502650 |
|---|----------------|

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Low Forward Voltage Drop and High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 2.3°C/W Junction to Case

Mechanical Data

- Mounting Torque: 0.5 in-lbs Maximum

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| KBJ10005G | KBJ10005G | 50V | 35V | 50V |
| KBJ1001G | KBJ1001G | 100V | 70V | 100V |
| KBJ1002G | KBJ1002G | 200V | 140V | 200V |
| KBJ1004G | KBJ1004G | 400V | 280V | 400V |
| KBJ1006G | KBJ1006G | 600V | 420V | 600V |
| KBJ1008G | KBJ1008G | 800V | 560V | 800V |
| KBJ1010G | KBJ1010G | 1000V | 700V | 1000V |

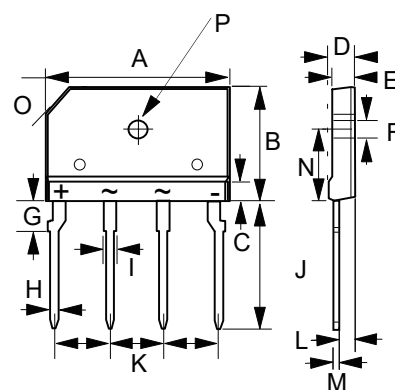
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|--------------------------------------|--|
| Average Forward Current | $I_{F(AV)}$ | 10A | $T_C = 100^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 170A | 8.3ms, Half Sine |
| Maximum Forward Voltage Drop Per Element | V_F | 1.0V | $I_{FM} = 5.0\text{A}$ Per Element; $T_J = 25^\circ\text{C}$ (Note 2) |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 5 μA 500 μA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| I^2t Rating for Fusing | I^2t | 120A ² S | $t < 8.3\text{ms}$ |

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a
2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

**10 Amp
Glass Passivated
Bridge Rectifiers
50 to 1000 Volts**

KBJ



| DIM | DIMENSIONS | | | | NOTE |
|-----|-------------|-------|-----------|-------|--------|
| | INCHES | | MM | | |
| A | 0.976 | 0.992 | 24.80 | 25.20 | |
| B | 0.579 | 0.602 | 14.70 | 15.30 | |
| C | 0.154 | 0.161 | 3.90 | 4.10 | |
| D | 0.173 | 0.189 | 4.40 | 4.80 | |
| E | 0.134 | 0.150 | 3.40 | 3.80 | |
| F | 0.122 | 0.134 | 3.10 | 3.40 | Φ |
| G | 0.130 | 0.146 | 3.30 | 3.70 | |
| H | 0.035 | 0.043 | 0.90 | 1.10 | |
| I | 0.059 | 0.075 | 1.50 | 1.90 | |
| J | 0.669 | 0.709 | 17.00 | 18.00 | |
| K | 0.287 | 0.303 | 7.30 | 7.70 | |
| L | 0.098 | 0.114 | 2.50 | 2.90 | |
| M | 0.024 | 0.031 | 0.60 | 0.80 | |
| N | 0.366 | 0.413 | 9.30 | 10.50 | |
| O | 0.118 X 45° | | 3.0 X 45° | | |
| P | 0.122 | 0.134 | 3.10 | 3.40 | Φ |

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

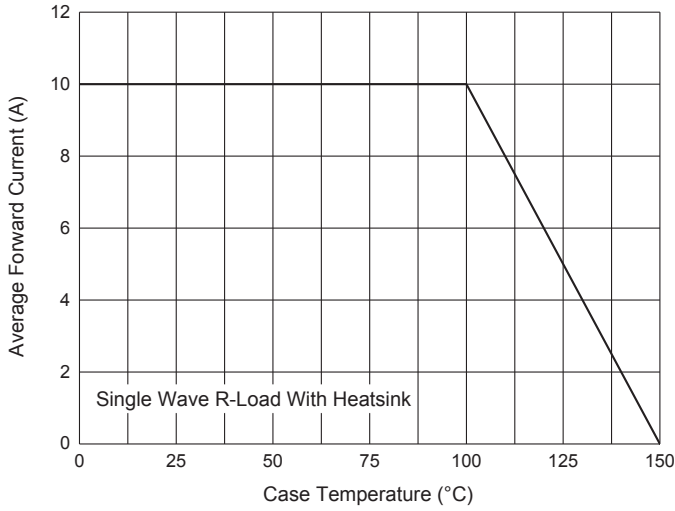


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

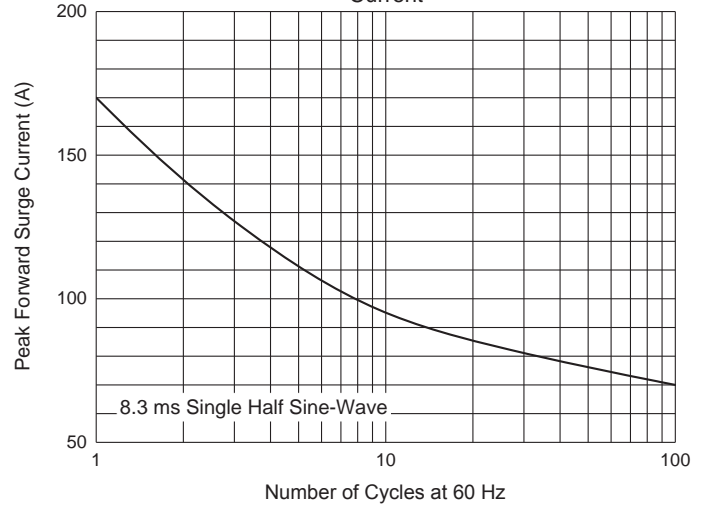


Fig. 3 - Typical Instantaneous Forward Characteristics

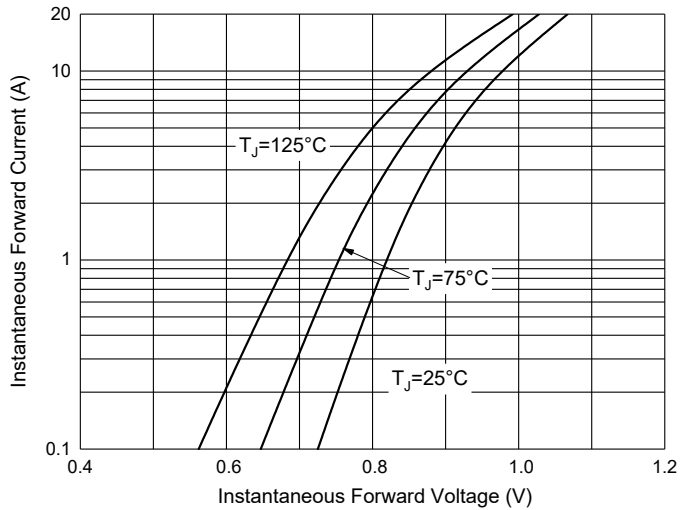


Fig. 4 - Typical Reverse Leakage Characteristics

