

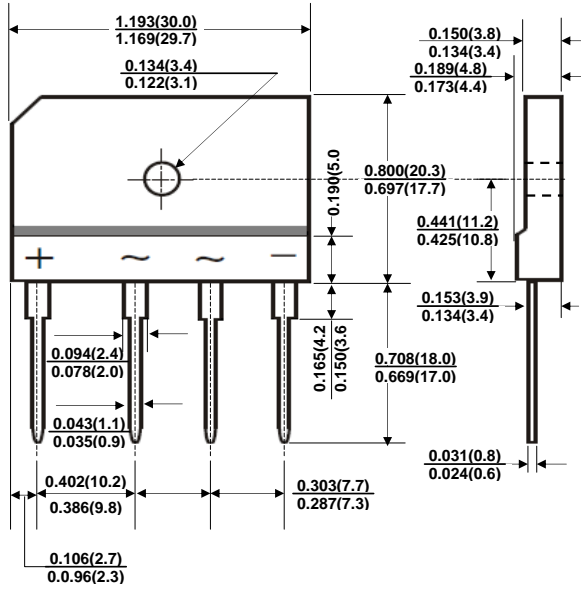


GBJ20005 THRU GBK2010

Single Phase 20.0 AMPS. Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts Forward Current - 20.0 Ampere

KBJ-6



Dimensions in inches and (millimeters)

FEATURES

- ◆ UL Recognized File#230084
- ◆ High surge forward current capability
- ◆ Plastic material has underwriters laboratory flammability classification 94V-0
- ◆ Mounting position:Any

MECHANICAL DATA

Case: KBJ-6(GBJ), Molded plastic

Terminals: Solderable per MIL-STD-750 Method 2026

Lead: solder plated

Polarity: As marked

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| PARAMETER | SYMBOLS | GBJ 20005 | GBJ 2001 | GBJ 2002 | GBJ 2004 | GBJ 2006 | GBJ 2008 | GBJ 2010 | 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 |
| Minimum DC Breakdown Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current With heatsink $T_c = 90^\circ\text{C}$ | $I_{F(AV)}$ | 20 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 240 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @ 10A | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ rated DC blocking voltage per leg $T_A = 125^\circ\text{C}$ | I_R | 10.0 500 | | | | | | | μA |
| Typical Thermal Resistance <small>(Note1)</small> | $R_{\theta JC}$ | 1.5 | | | | | | | $^\circ\text{C/W}$ |
| I^2t Rating for fusing ($t < 8.3\text{ms}$) | I^2t | 240 | | | | | | | A^2S |
| Mounting Torque <small>(Note 2)</small> | T_{OR} | 8 | | | | | | | $\text{N}\cdot\text{m}$ |
| Dielectric Strength at Terminals to case AC 1 minute | V_{dis} | 2.5 | | | | | | | KV |
| Operating Temperature and Storage Temperature Range | T_J & T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note: 1. Between junction and case, With heatsink

2. Recommend torque : 5kg·cm



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

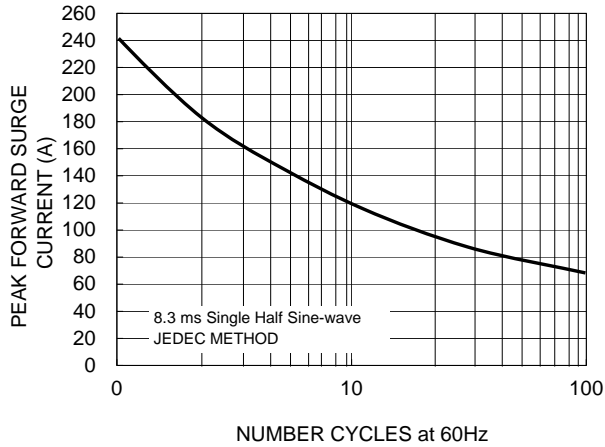


FIG. 2 MAXIMUM FORWARD CURRENT DERATING CURVE

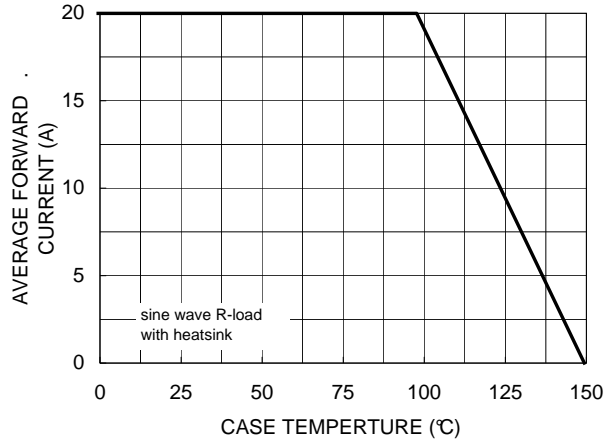


FIG. 3-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

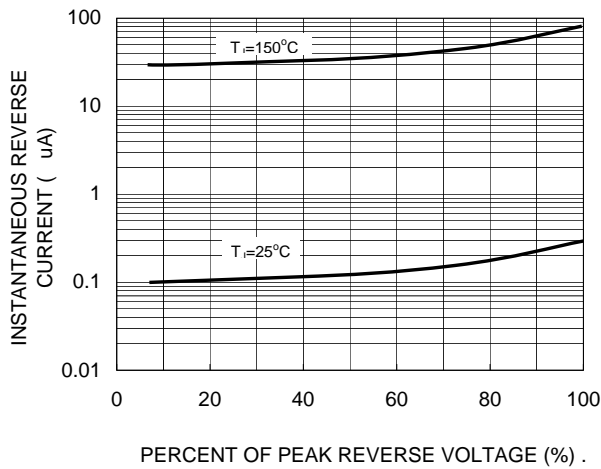


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

