

SILICON BRIDGE RECTIFIERS

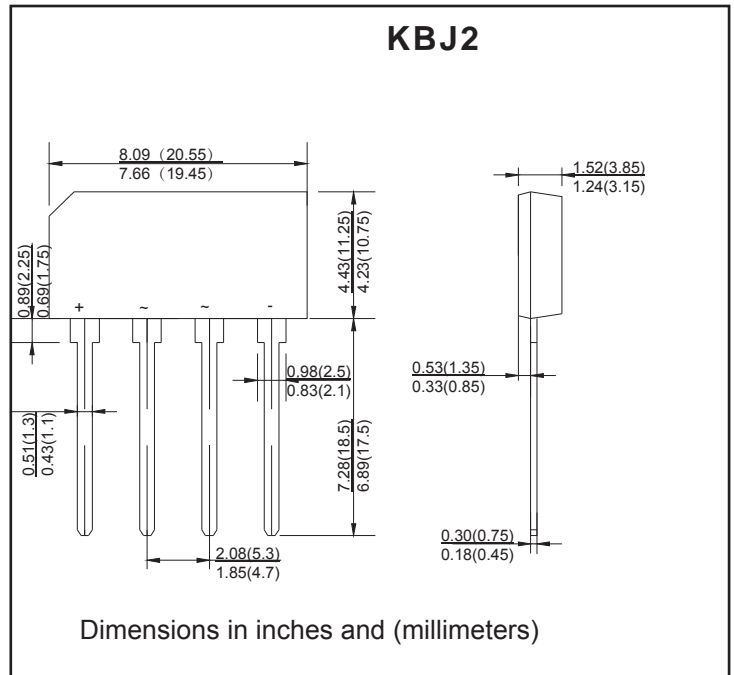
VOLTAGE RANGE: 50 --- 1000 V CURRENT: 2.0 A

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 50Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing m olded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 m method 208

MECHANICAL DATA

- Polarity: Symbols molded on body
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

| | | KBJ 2A | KBJ 2B | KBJ 2D | KBJ 2G | KBJ 2J | KBJ 2K | KBJ 2M | UNITS |
|--|-----------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------------|
| Maximum recurrent 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 |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward Output current @ $T_A=50^\circ\text{C}$ | $I_{F(AV)}$ | 2.0 | | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load | I_{FSM} | 50.0 | | | | | | | A |
| Maximum instantaneous forward voltage at 1.0 A | V_F | 1.0 | | | | | | | V |
| Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$ | I_R | 10.0 1.0 | | | | | | | μA mA |
| Typical junction capacitance per element | C_J | 45 | | | | | | | pF |
| Typical thermal resistance | $R_{\theta JC}$ | 2.2 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating junction temperature range | T_J | - 55 ---- + 125 | | | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | - 55 ---- + 150 | | | | | | | $^\circ\text{C}$ |

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

2. Device mounted on 300mm X 300mm X 1.6mm cu Plate heatsink.



RATINGS AND CHARACTERISTIC CURVES

FIG.1 – PEAK FORWARD SURGE CURRENT

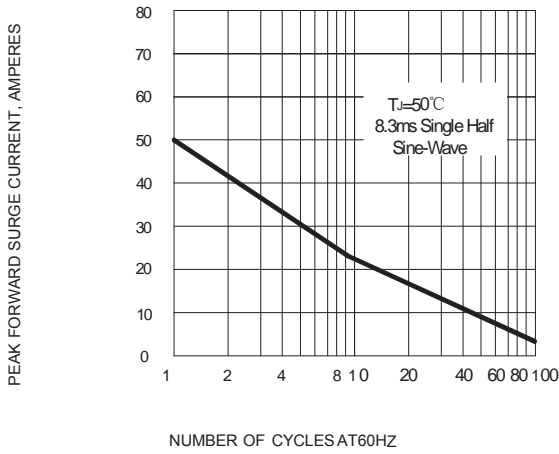


FIG.2 – FORWARD DERATING CURVE

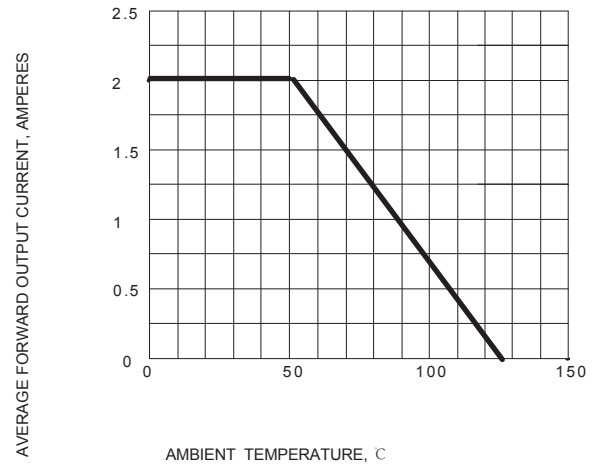


FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

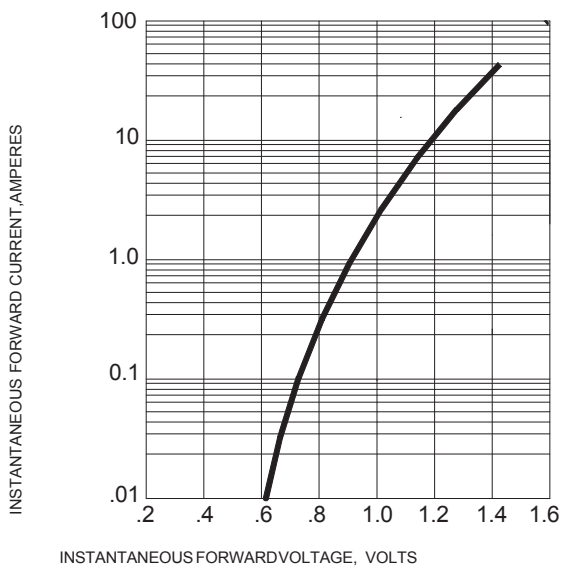


FIG.4 -- TYPICAL JUNCTION CAPACITANCE

