



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**B04AF
THRU
B04MF**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SURFACE MOUNT BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts **CURRENT - 0.4 Ampere**

FEATURES

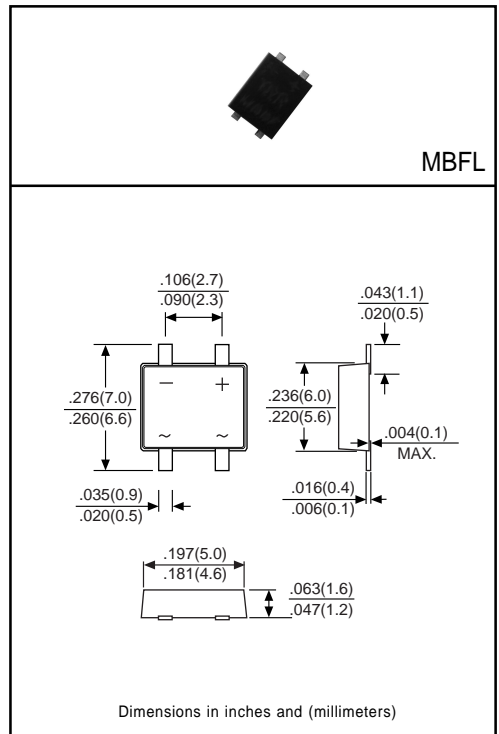
- * Ideal for automated placement
- * Low profile space
- * Low forward voltage drop
- * Low leakage current
- * High forward surge capability
- * Glass passivated junction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Symbols molded or marked on body
- * Mounting position: Any
- * Weight: 0.12 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



| | SYMBOL | B04AF | B04BF | B04DF | B04GF | B04JF | B04KF | B04MF | UNITS |
|---|-----------------------------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Bridge Input Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Output Current | I _O | 0.4 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 20 | | | | | | | Amps |
| Maximum DC Forward Voltage Drop per Bridge Element at 0.4A DC | V _F | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at rated | I _R | @ T _A = 25°C | | | | | | | μAmps |
| DC Blocking Voltage per element | | @ T _A = 125°C | | | | | | | |
| Typical Thermal Resistance (Note 2) | R _{θJA} | 105 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to + 150 | | | | | | | °C |

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 2. On P.C.B. with 0.05 x 0.05" (1.3x1.3mm) copper pads.

RATING AND CHARACTERISTIC CURVES (B04AF THRU B04MF)

FIG. 1 - DERATING CURVE FOR OUTPUT CURRENT

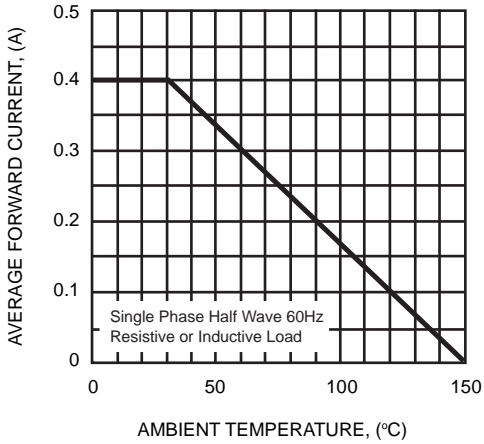


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

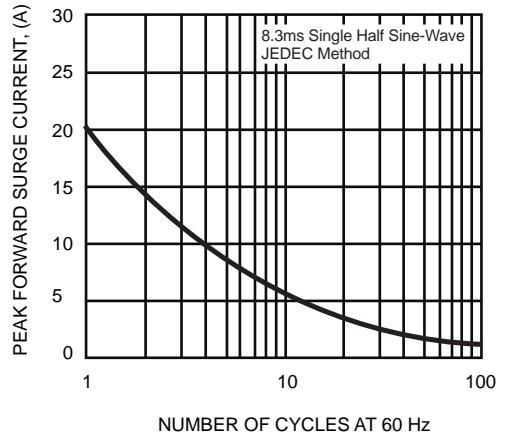


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

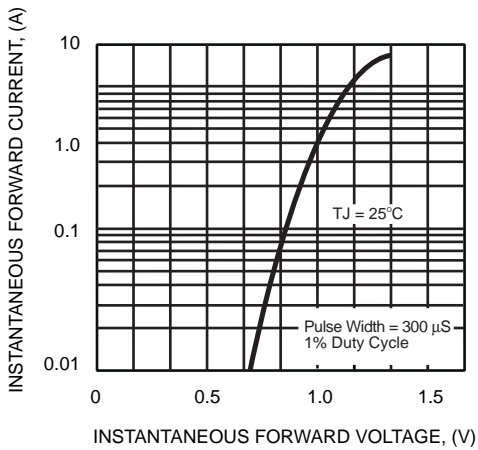
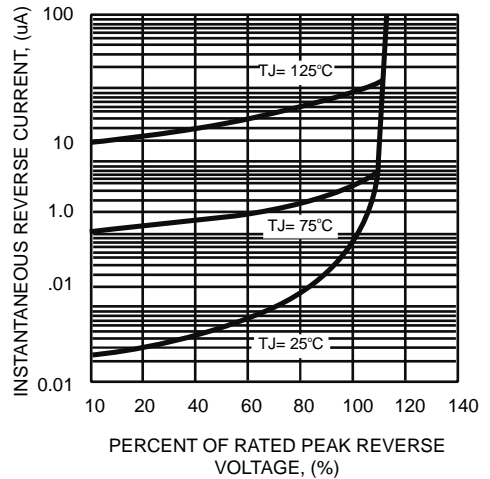


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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