



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**MMB3505
THRU
MMB3510**

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER
VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 35 Amperes*

FEATURES

- * Metal case for Maximum Heat Dissipation
- * Diffused Junction
- * High current capability
- * Surge overload ratings - 400 Amperes
- * Low forward voltage drop
- * High Reliability

MECHANICAL DATA

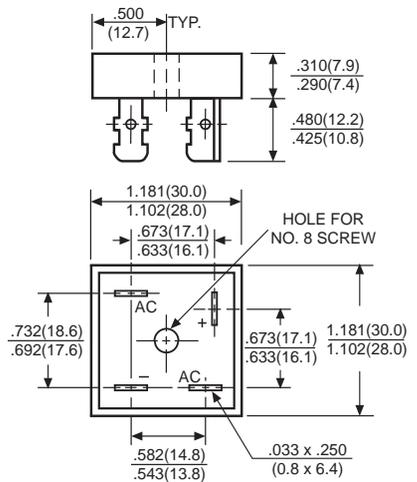
- * Case: Metal case, electrically isolated
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Plated .25"(6.35mm) Faston lugs, Solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 25 grams approx.

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%.



MMB-25



Dimensions in inches and (millimeters)

| | SYMBOL | MMB3505 | MMB351 | MMB352 | MMB354 | MMB356 | MMB358 | MMB3510 | UNITS | |
|---|------------------|--------------|--------|--------|--------|--------|--------|---------|--------------------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum RMS Bridge Input Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts | |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Maximum Average Forward Rectified Output Current at Tc = 55°C | Io | 35 | | | | | | | Amps | |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 400 | | | | | | | Amps | |
| Maximum Forward Voltage Drop per element at 17.5A DC | Vf | 1.1 | | | | | | | Volts | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per element | Ir | @ TA = 25°C | 10 | | | | | | | μAmps |
| | | @ TA = 100°C | 500 | | | | | | | |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 664 | | | | | | | A ² Sec | |
| Typical Junction Capacitance (Note1) | Cj | 300 | | | | | | | pF | |
| Typical Thermal Resistance (Note 2) | RθJC | 2.2 | | | | | | | °C/W | |
| Operating and Storage Temperature Range | Tj,Tstg | -55 to +150 | | | | | | | °C | |

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Thermal Resistance from Junction to Case per leg.

RATING AND CHARACTERISTIC CURVES (MMB3505 THRU MMB3510)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

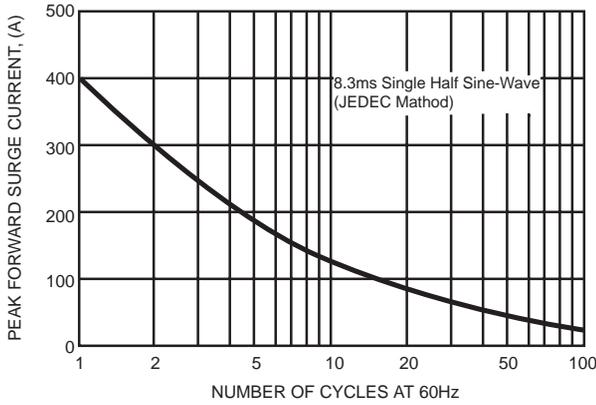


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

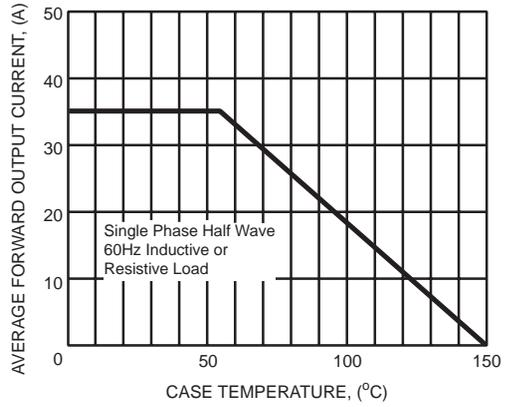


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

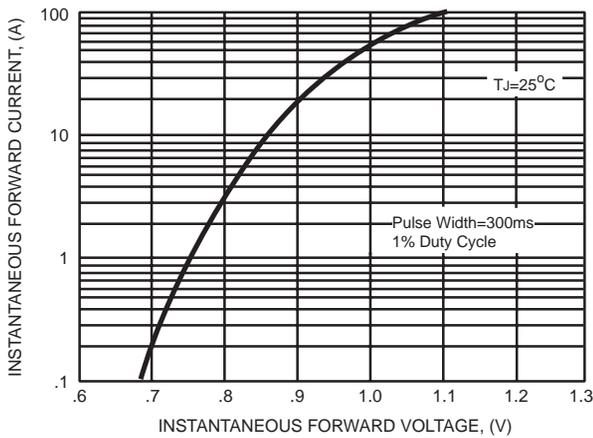


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

