

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes

FEATURES

- * Superior thermal desing
- * 400 amperes surge rating
- * 1/4" universal faston terminal
- * Hole thru for # 8 screw

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O

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%.



MB-35



MB-35W

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | MB3505 | MB351 | MB352 | MB354 | MB356 | MB358 | MB3510 | 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 Rectified Output Current at T _c = 55°C | I _o | 35.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 400 | | | | | | | Amps |
| Operating and Storage Temperature Range | T _J ,T _{STG} | -55 to + 175 | | | | | | | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | MB3505 | MB351 | MB352 | MB354 | MB356 | MB358 | MB3510 | UNITS |
|--|----------------|--------|-------|-------|-------|-------|-------|--------|-------|
| Maximum Forward Voltage Drop per element at 17.5A DC | V _F | 1.1 | | | | | | | Volts |
| Maximum Reverse Current at Rated | I _R | 10 | | | | | | | uAmps |
| DC Blocking Voltage per element | | 0.5 | | | | | | | mAmps |

NOTE: Suffix "W" for wire type

RATING AND CHARACTERISTIC CURVES (MB3505 THRU MB3510)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

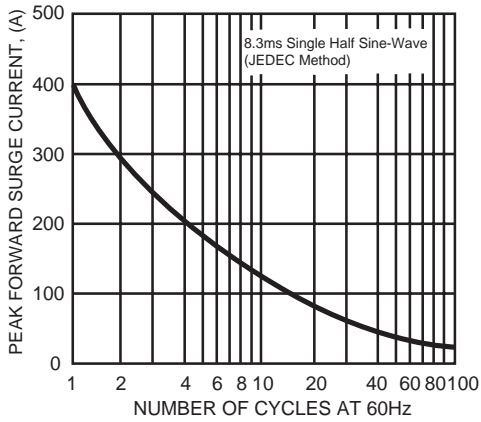


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

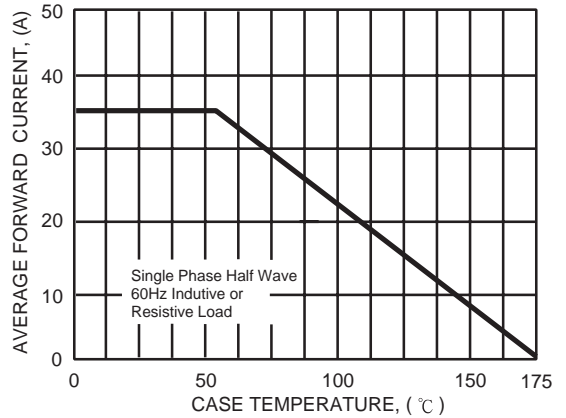


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

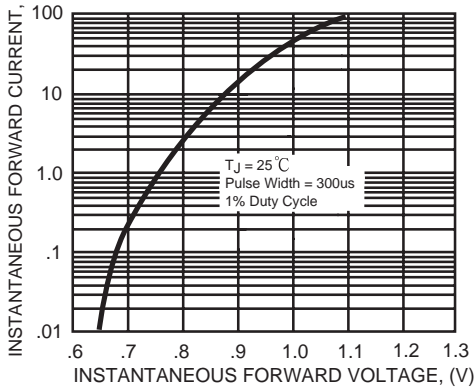


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

