

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 100 Volts CURRENT 1.0 Ampere

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.09 gram

MECHANICAL DATA

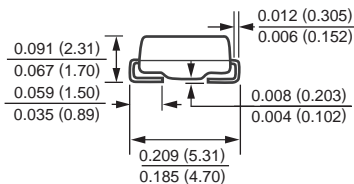
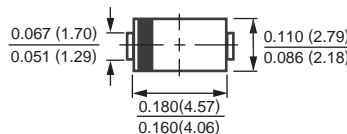
- * Epoxy: Device has UL flammability classification 94V-0

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%.



DO-214AC



Dimensions in inches and (millimeters)

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

| RATINGS | SYMBOL | FMB120 | FMB130 | FMB140 | FMB150 | FMB160 | FMB180 | FMB1100 | UNITS |
|---|--------|--------------|--------|--------|--------------|--------|--------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 20 | 30 | 40 | 50 | 60 | 80 | 100 | Volts |
| Maximum RMS Voltage | VRMS | 14 | 21 | 28 | 35 | 42 | 56 | 70 | Volts |
| Maximum DC Blocking Voltage | VDC | 20 | 30 | 40 | 50 | 60 | 80 | 100 | Volts |
| Maximum Average Forward Rectified Current at Derating Lead Temperature | IO | | | | | 1.0 | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | | | | | 40 | | | Amps |
| Typical Thermal Resistance (Note 1) | RθJA | | | | | 50 | | | °C/W |
| Typical Junction Capacitance (Note 2) | CJ | | | | | 110 | | | pF |
| Operating Temperature Range | TJ | -65 to + 125 | | | -65 to + 150 | | | | °C |
| Storage Temperature Range | TSTG | -65 to + 150 | | | | | | | °C |

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

| CHARACTERISTICS | SYMBOL | FMB120 | FMB130 | FMB140 | FMB150 | FMB160 | FMB180 | FMB1100 | UNITS |
|--|--------|--------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Instantaneous Forward Voltage at 1.0A DC | VF | .55 | | | .70 | | .85 | | Volts |
| Maximum Average Reverse Current at Rated DC Blocking Voltage | IR | | | | 1.0 | | | | mAmps |
| | | | | | 10 | | | | mAmps |

- NOTES : 1. Thermal Resistance (Junction to Ambient).
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 3. P.C.B Monuted with 0.2X0.2" (5.0X5.0mm²) copper pad area.

RATING AND CHARACTERISTIC CURVES (FM120 THRU FM1100)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

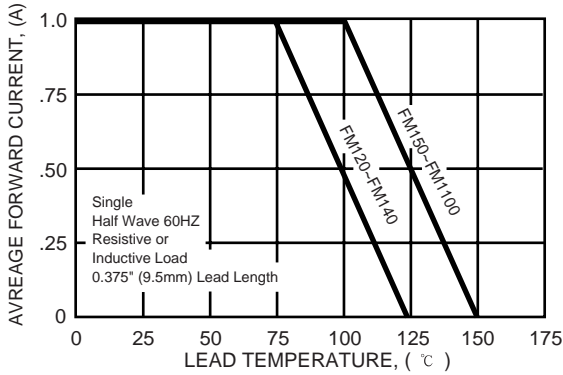


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

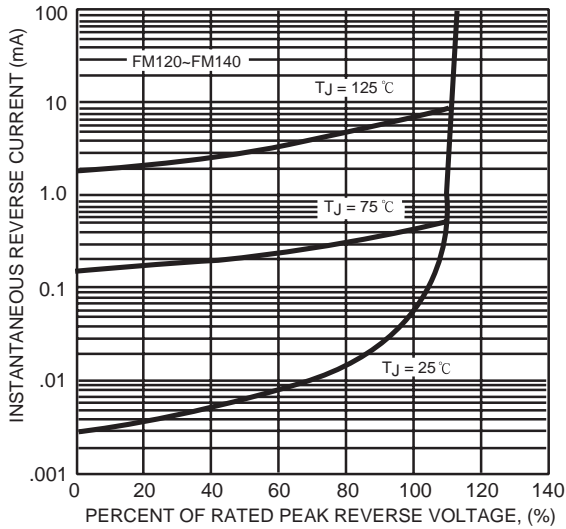


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

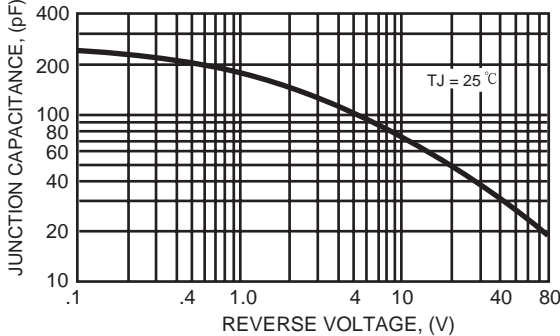


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

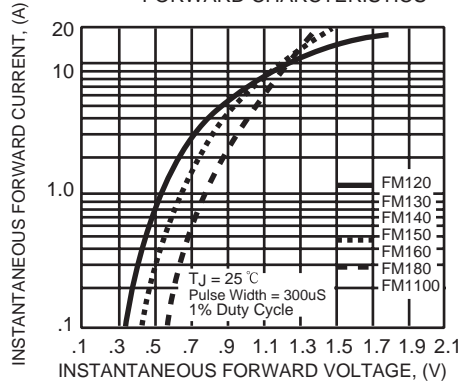


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

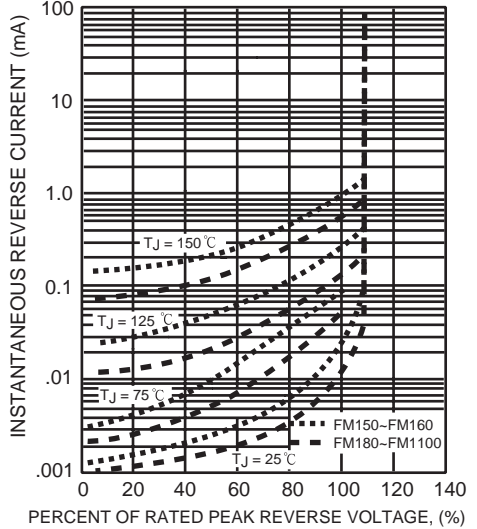


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

