

**HIGH VOLTAGE RECTIFIER**

**VOLTAGE 2500 Volts CURRENT 0.15 Ampere**

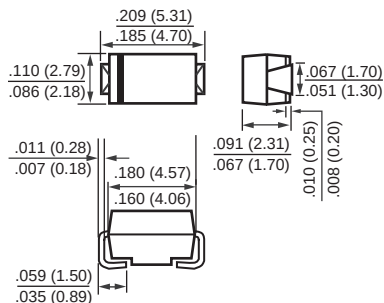
**FEATURES**

- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any

**SMX**



**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%.

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

| RATINGS                                                                                                       | SYMBOL   | FM2500W      | UNITS |
|---------------------------------------------------------------------------------------------------------------|----------|--------------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                                        | VRRM     | 2500         | Volts |
| Maximum RMS Volts                                                                                             | VRMS     | 1750         | Volts |
| Maximum DC Blocking Voltage                                                                                   | VDC      | 2500         | Volts |
| Maximum Average Forward Rectified Current<br>at TA = 50°C                                                     | Io       | 0.15         | Amps  |
| Peak Forward Surge Current, 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method)         | IFSM     | 30           | Amps  |
| Peak Forward Surge Current, 10 ms single half sine-wave<br>superimposed on rated load at 105°C (JEDEC method) | IFSM     | 3.0          | Amps  |
| Typical Junction Capacitance (Note)                                                                           | CJ       | 35           | pF    |
| Operating and Storage Temperature Range                                                                       | TJ, TSTG | -55 to + 150 | °C    |

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

| CHARACTERISTICS                                                                                  | SYMBOL | FM2500W | UNITS |
|--------------------------------------------------------------------------------------------------|--------|---------|-------|
| Maximum Instantaneous Forward Voltage at 0.15A DC                                                | VF     | 2.0     | Volts |
| Maximum DC Reverse Current<br>@ TA = 25°C                                                        | IR     | 5.0     | uAmps |
| at Rated DC Blocking Voltage<br>@ TA =100°C                                                      |        | 50      |       |
| Maximum Full Load Reverse Current Average, Full Cycle<br>.375", (9.5mm) lead length at TL = 75°C |        | 30      | uAmps |

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts.

## RATING AND CHARACTERISTIC CURVES ( FM2500W )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

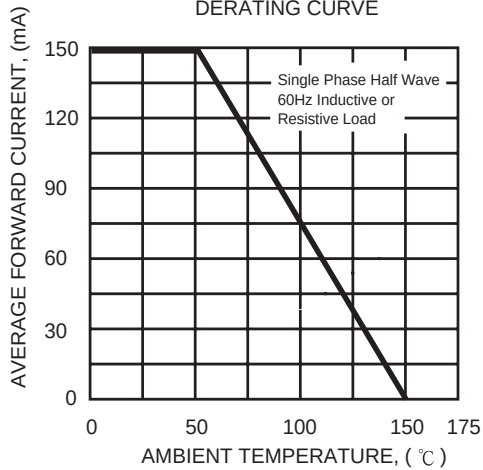


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

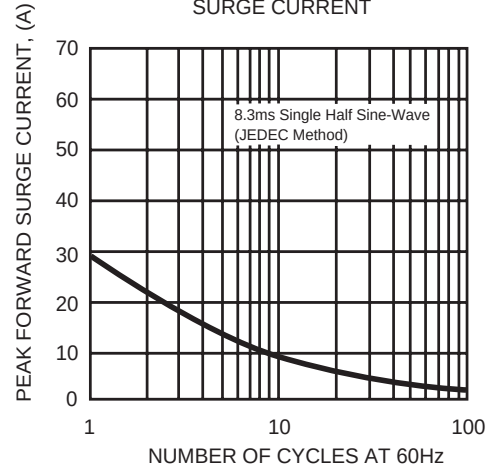


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

