

FM1200W THRU FM2000W

# HIGH VOLTAGE RECTIFIER

# VOLTAGE RANGE 1200 to 2000 Volts CURRENT 0.2 to 0.5 Ampere

#### **FEATURES**

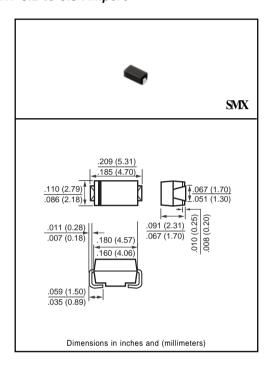
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

## **MECHANICAL DATA**

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

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25  $^{\circ}$ 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   | FM1200W | FM1500W | FM1800W | FM2000W | UNITS |
|--|----------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage   | VRRM     | 1200    | 1500    | 1800    | 2000    | Volts |
| Maximum RMS Volts  | VRMS     | 840     | 1050    | 1260    | 1400    | Volts |
| Maximum DC Blocking Voltage  | VDC      | 1200    | 1500    | 1800    | 2000    | Volts |
| Maximum Average Forward Rectified Current at TA = 50°C   | lo       | 500     |         |         | 200     | mAmps |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM     |         | Amps    |         |         |       |
| Typical Junction Capacitance (Note)  | Сл       |         | pF      |         |         |       |
| Operating and Storage Temperature Range  | TJ, TSTG |         | °C      |         |         |       |

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

| CHARACTERISTICS   |            | SYMBOL         | FM1200W | FM1500W | FM1800W | FM2000W | UNITS |
|---|------------|----------------|---------|---------|---------|---------|-------|
| Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC   |            | VF             | 2.0     |         |         | 3.0     | Volts |
| Maximum DC Reverse Current  | @TA = 25°C |                | 5.0     |         |         |         | uAmps |
| at Rated DC Blocking Voltage  | @Ta =100°C | l <sub>R</sub> | 50      |         |         |         |       |
| Maximum Full Load Reverse Current Average, Full Cycle .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 (FM1200W THRU FM2000W)

