

# FM1200W THRU FM2000W

### HIGH VOLTAGE RECTIFIER

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

### **FEATURES**

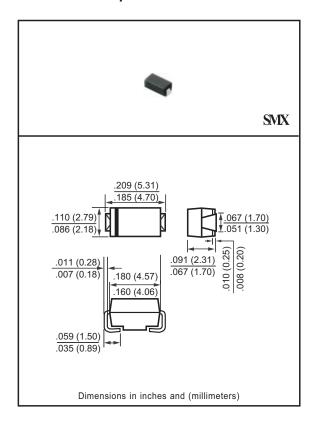
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

#### **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  $25\,^{\circ}\text{C}$  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)

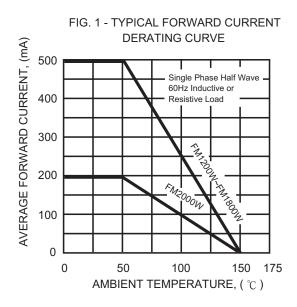
RATINGS	SYMBOL	FM1200W	FM1500W	FM1800W	FM2000W	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	1200	1500	1800	2000	Volts
Maximum RMS Volts	VRMS	840	1050	1260	1400	Volts
Maximum DC Blocking Voltage	VDC	1200	1500	1800	2000	Volts
Maximum Average Forward Rectified Current at TA = 50°C	lo	500 200		200	mAmps	
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	lfsm	25			Amps	
Typical Current Squared Time	I <sup>2</sup> T	2.59			A <sup>2</sup> S	
Typical Junction Capacitance (Note)	Cı	35			pF	
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150			٥C	

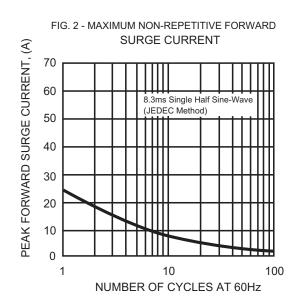
#### **ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

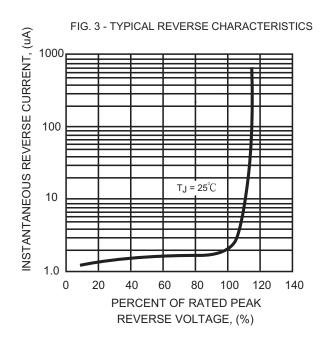
CHARACTERISTICS		SYMBOL	FM1200W	FM1500W	FM1800W	FM2000W	UNITS
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC		VF	2.0 3.0			Volts	
Maximum DC Reverse Current	@TA = 25°C		5.0			uAmps	
at Rated DC Blocking Voltage	@TA =125°C	] IR	50				
Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at TL = 75°C				3	30		uAmps

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

## RATING AND CHARACTERISTIC CURVES (FM1200W THRU FM2000W)

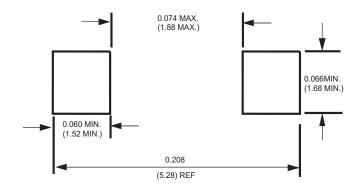








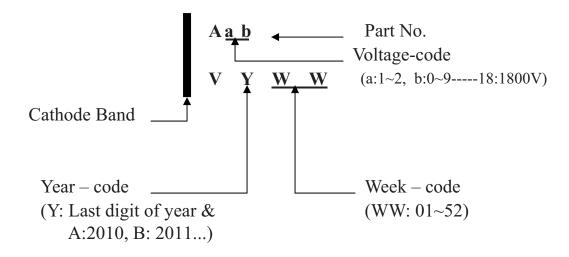
## **Mounting Pad Layout**



Dimensions in inches and (millimeters)



# **Mark Description**

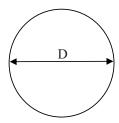


# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### REEL PACK

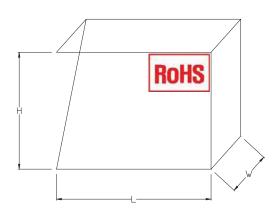
PACKAGE	PACKING CODE	EA PER REEL	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)		GROSS WEIGHT(Kg)
SMX	-T	1,500			180	390*205*310	48,000	
SMX	-W	5,000			330	355*360*350	80,000	15.20

### 1. REEL



Packing	D		
Code	(mm)		
-T	180		
-W	330		

## 2. CARTON



Packing	L	W	Н
Code	(mm)	(mm)	(mm)
-T	390	205	310
-W	355	360	350

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