

HIGH VOLTAGE RECTIFIER

VOLTAGE RANGE 1200 to 2000 Volts CURRENT 0.2 to 0.5 Ampere

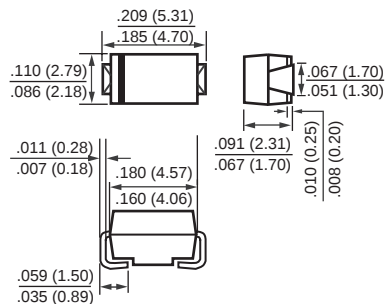
FEATURES

- * 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

SMX



Dimensions in inches and (millimeters)

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	FM1200W	FM1500W	FM1800W	FM2000W	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1200	1500	1800	2000	Volts
Maximum RMS Volts	V _{RMS}	840	1050	1260	1400	Volts
Maximum DC Blocking Voltage	V _{DC}	1200	1500	1800	2000	Volts
Maximum Average Forward Rectified Current at TA = 50°C	I _O	500			200	mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25				Amps
Typical Junction Capacitance (Note)	C _J	35				pF
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150				°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	V _F	2.0			3.0	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	5.0				uAmps
@T _A = 25°C						
@T _A =100°C		50				
Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at T _L = 75°C		30				uAmps

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

RATING AND CHARACTERISTIC CURVES (FM1200W THRU FM2000W)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

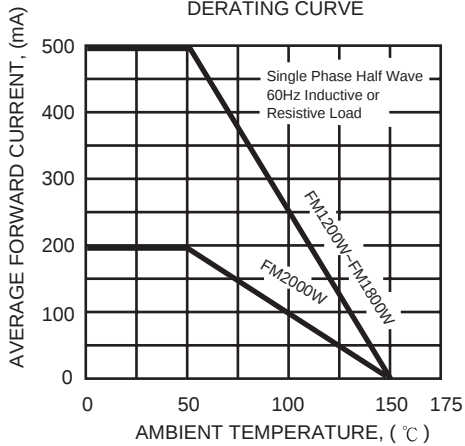


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

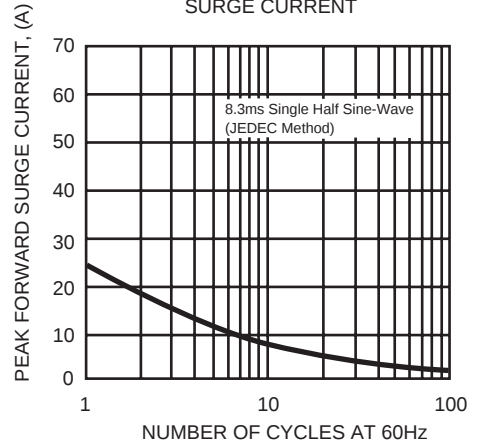


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

