

HIGH VOLTAGE RECTIFIER

VOLTAGE RANGE 1200 to 3500 Volts CURRENT 0.2 to 0.5 Ampere

FEATURES

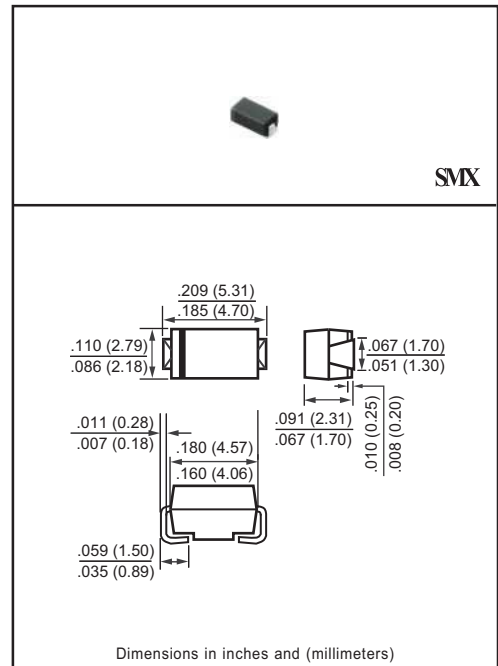
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * P/N suffix V means AEC-Q101 qualified, e.g:FM3500WV
- * P/N suffix V means Halogen-free

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°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)

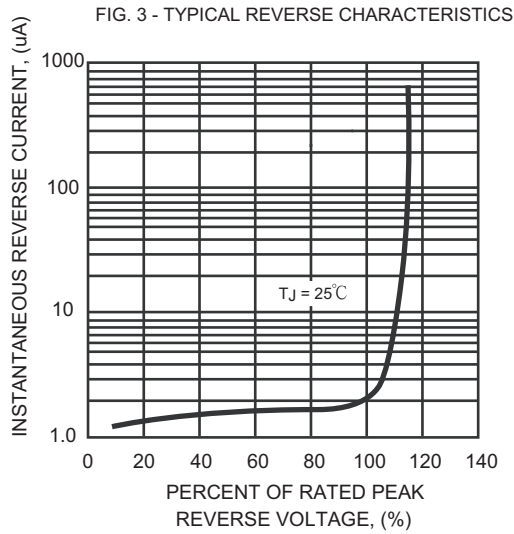
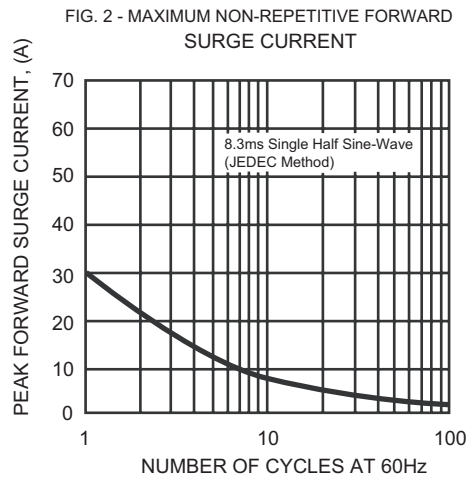
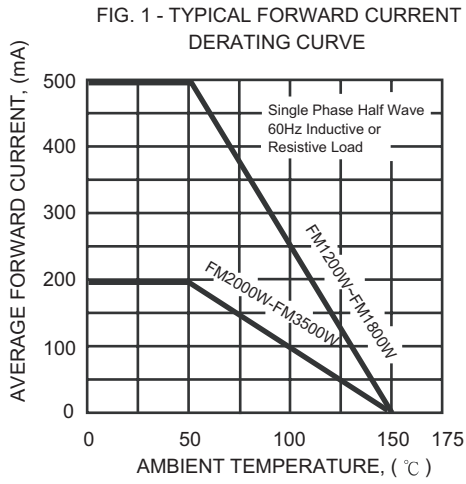
RATINGS	SYMBOL	FM1200W	FM1600W	FM1800W	FM2000W	FM2500W	FM3000W	FM3500W	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1200	1600	1800	2000	2500	3000	3500	Volts
Maximum RMS Volts	V _{RMS}	840	1120	1260	1400	1750	2100	2450	Volts
Maximum DC Blocking Voltage	V _{DC}	1200	1600	1800	2000	2500	3000	3500	Volts
Maximum Average Forward Rectified Current at TA = 75°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}					30			Amps
Typical Current Squared Time	i ² T					3.73			A ² S
Typical Junction Capacitance (Note)	C _J					15			pF
Operating and Storage Temperature Range	T _J , T _{STG}					-55 to +150			°C

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

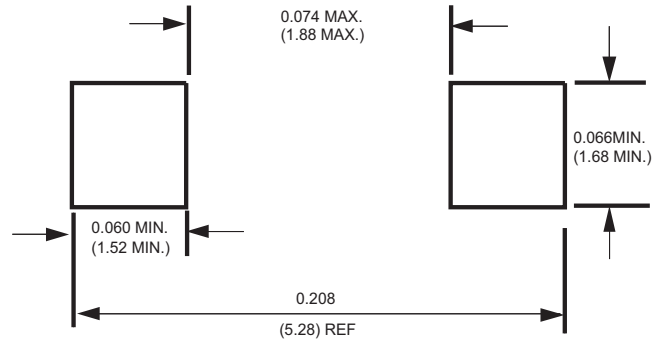
CHARACTERISTICS	SYMBOL	FM1200W	FM1600W	FM1800W	FM2000W	FM2500W	FM3000W	FM3500W	UNITS
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC	V _F	1.5			2.5				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage @TA = 25°C	I _R					5.0			uAmps
@TA = 150°C						1.0			mAmps
Maximum Full Load Reverse 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 FM3500W)

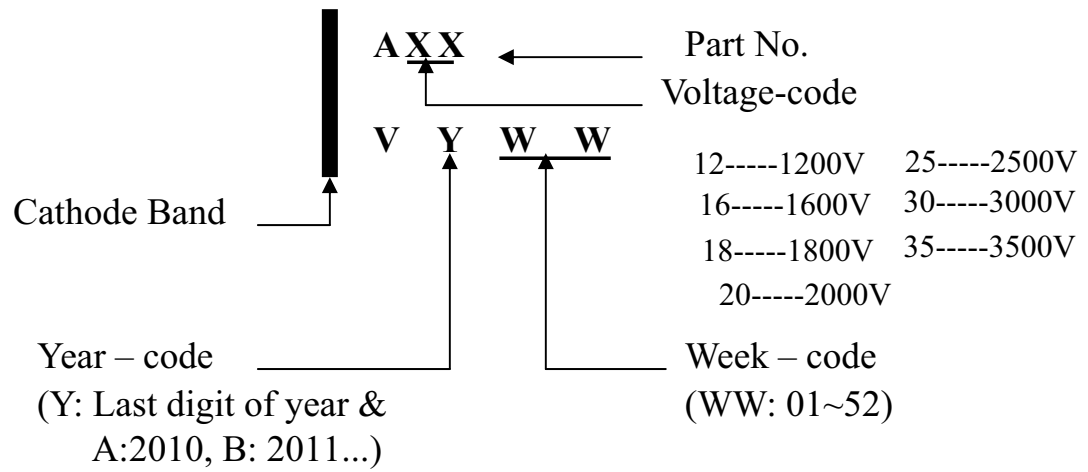


Mounting Pad Layout



Dimensions in inches and (millimeters)

Mark Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMX	-W	7,500	15,000	---	---	330	360*355*360	120,000	15.2

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMX	-T	2,000	8,000	---	---	178	390*205*310	64,000	7.8

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