

SURFACE MOUNT SILICON RECTIFIER

FM4001W
THRU
FM4007W

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

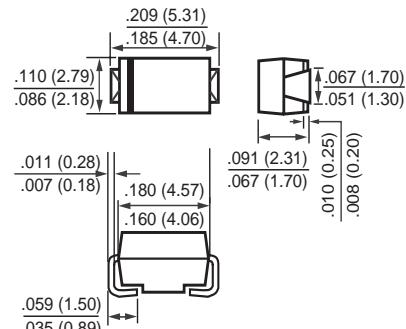
FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any
- * Weight: 0.057 gram

MECHANICAL DATA

- * Epoxy : Device has UL flammability classification 94V-0

SMX



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	FM4001W	FM4002W	FM4003W	FM4004W	FM4005W	FM4006W	FM4007W	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	I _O				1.0				Amps
Peak Forward Surge Current I _{FM(surge)} : 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}				30				Amps
Maximum Thermal Resistance	(Note 2) R _{θJL}				60				°C/W
	(Note 3) R _{θJA}				100				°C/W
Typical Junction Capacitance (Note 1)	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	FM4001W	FM4002W	FM4003W	FM4004W	FM4005W	FM4006W	FM4007W	UNITS
Maximum Forward Voltage at 1.0A DC	V _F				1.1				Volts
Maximum Full Load Reverse Current, Full cycle Average at TA=75°C	I _R				30				uAmps
Maximum DC Average Reverse Current at Rated DC Blocking Voltage	@ TA = 25°C				5.0				uAmps
					50				uAmps

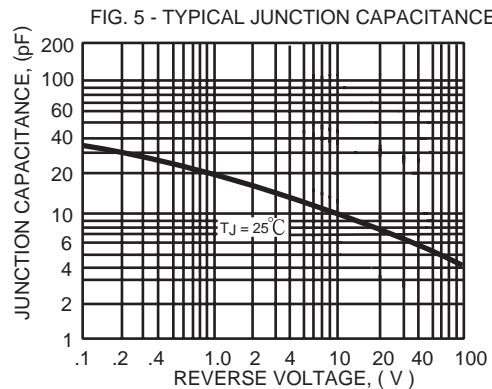
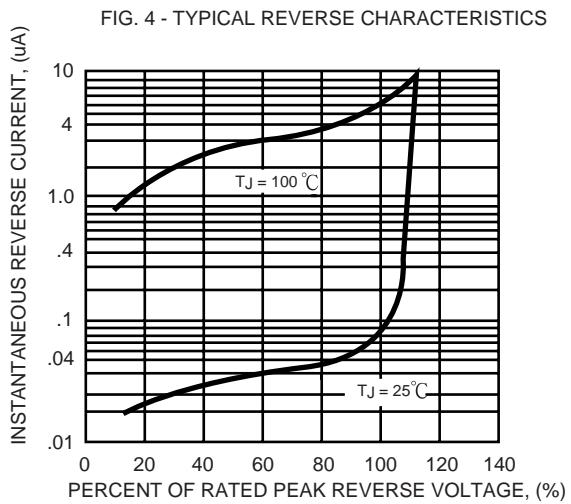
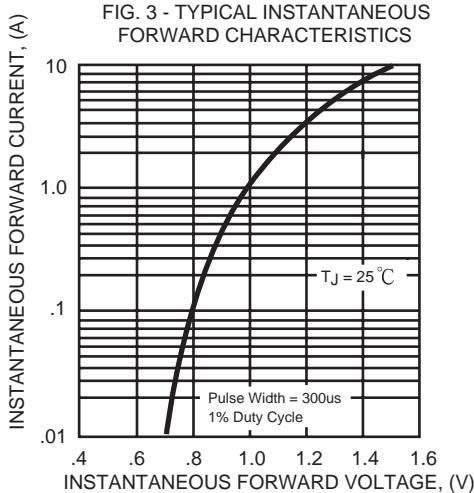
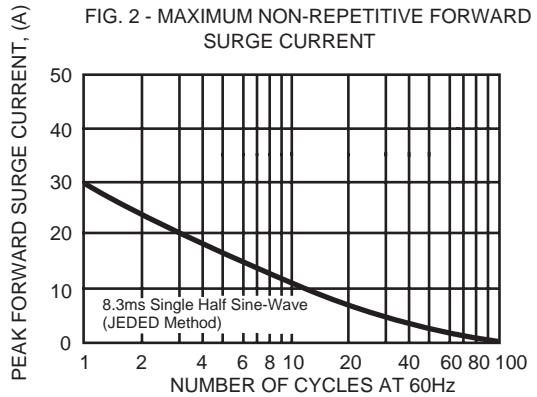
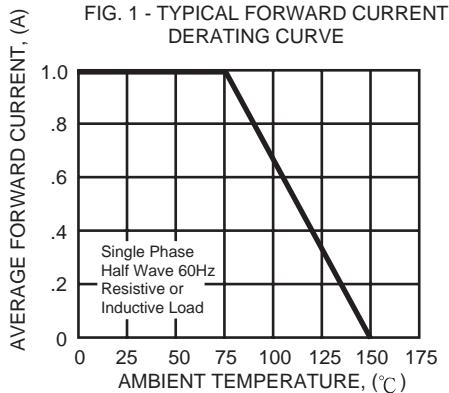
NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC

2. Thermal resistance junction to terminal 6.0mm² copper pads to each terminal.

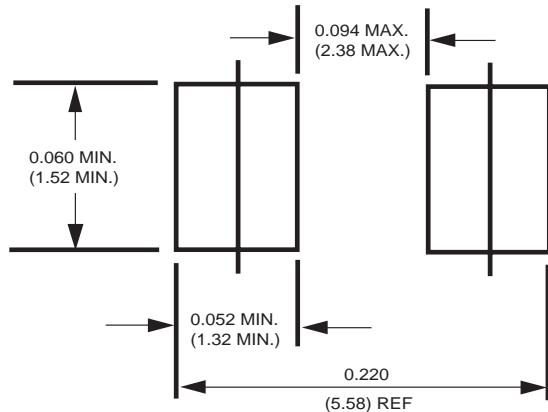
3. Thermal resistance junction to ambient, 6.0mm² copper pads to each terminal.

2002-11

RATING AND CHARACTERISTIC CURVES (FM4001W THRU FM4007W)



Mounting Pad Layout



Dimensions in inches and (millimeters)