

**SURFACE MOUNT**  
**GLASS PASSIVATED SILICON RECTIFIER**  
**VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere**

**FEATURES**

- \* Glass passivated device
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.098 gram

**MECHANICAL DATA**

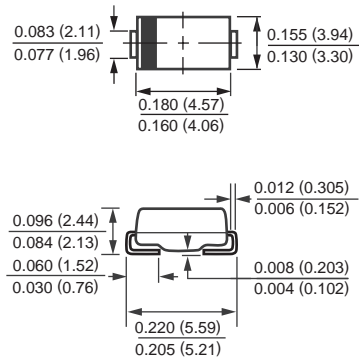
- \* Epoxy : Device has UL flammability classification 94V-0

**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%.



**DO-214AA**



Dimensions in inches and (millimeters)

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

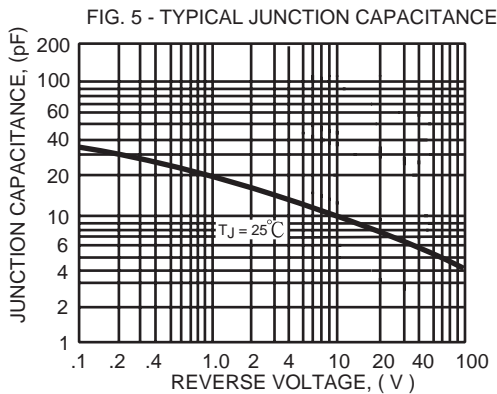
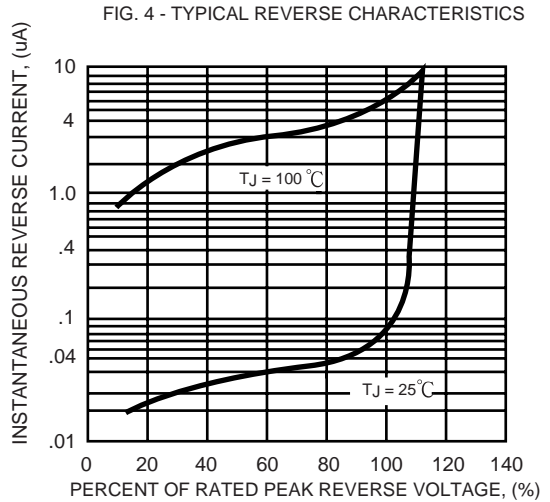
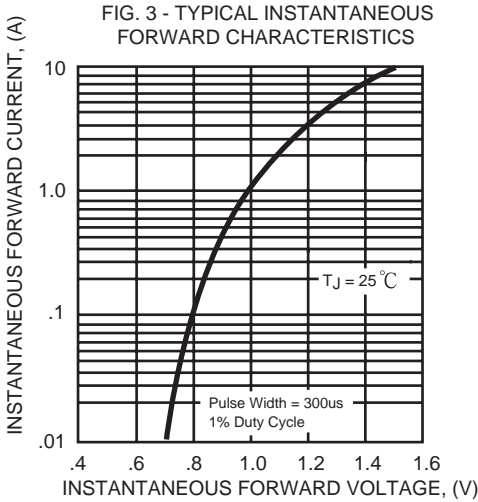
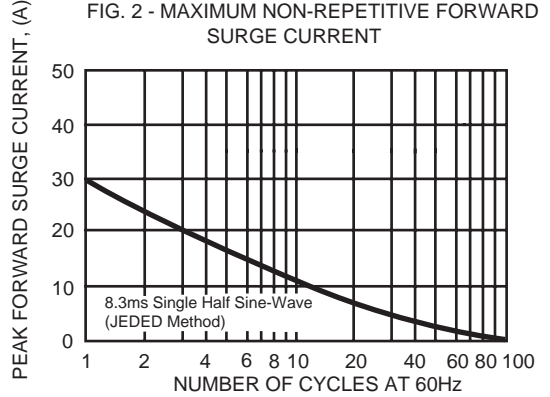
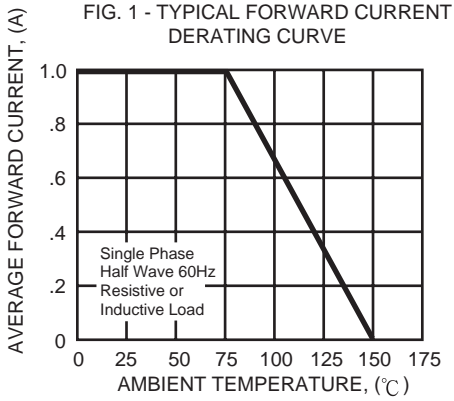
RATINGS	SYMBOL	FM4001B	FM4002B	FM4003B	FM4004B	FM4005B	FM4006B	FM4007B	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	Io	1.0							Amps
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							Amps
Maximum Thermal Resistance	(Note 2) RθJL	60							°C/W
	(Note 3) RθJA	100							°C/W
Typical Junction Capacitance (Note 1)	CJ	15							pF
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150							°C

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

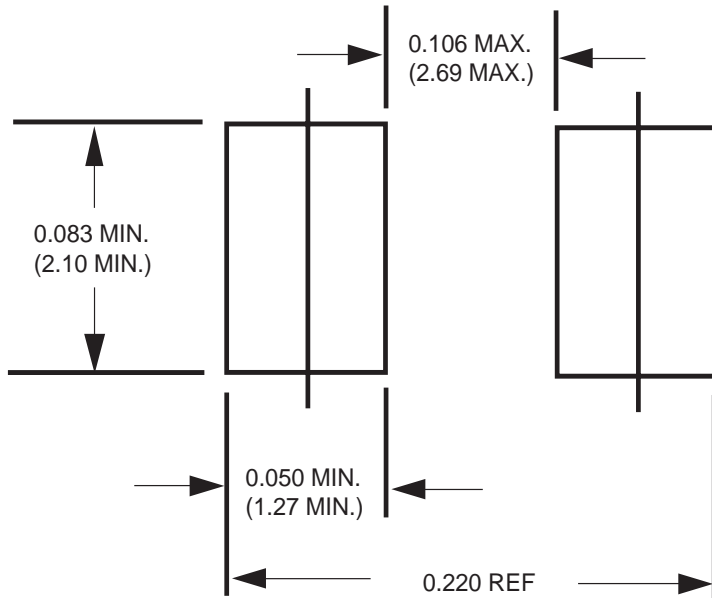
CHARACTERISTICS	SYMBOL	FM4001B	FM4002B	FM4003B	FM4004B	FM4005B	FM4006B	FM4007B	UNITS
Maximum Forward Voltage at 1.0A DC	VF	1.1							Volts
Maximum Full Load Reverse Current, Full cycle Average at TA=75°C	IR	30							uAmps
Maximum DC Average Reverse Current at @TA = 25°C		5.0							uAmps
Rated DC Blocking Voltage @TA = 125°C		100							uAmps

- NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC  
 2. Thermal resistance junction to terminal 6.0mm<sup>2</sup> copper pads to each terminal.  
 3. Thermal resistance junction to ambient, 6.0mm<sup>2</sup> copper pads to each terminal.

# RATING AND CHARACTERISTIC CURVES ( FM4001B THRU FM4007B )



## Mounting Pad Layout



Dimensions in inches and (millimeters)