

**SURFACE MOUNT SILICON RECTIFIER**

**VOLTAGE 3200 Volts CURRENT 0.2 Ampere**

**FEATURES**

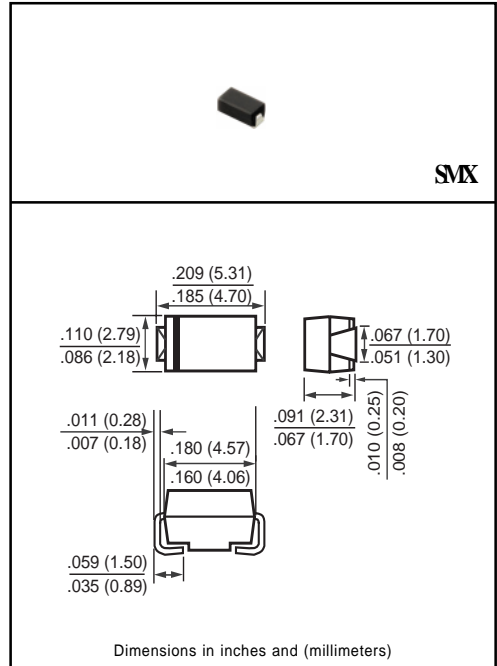
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.057 gram

**MECHANICAL DATA**

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

**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	FM4032W	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	3200	Volts
Maximum RMS Voltage	VRMS	2240	Volts
Maximum DC Blocking Voltage	Vdc	3200	Volts
Maximum Average Forward Rectified Current at TA = 50°C	Io	0.2	Amps
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	25	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	FM4032W	UNITS
Maximum Forward Voltage at 0.2A DC	VF	1.8	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 ( FM4032W )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

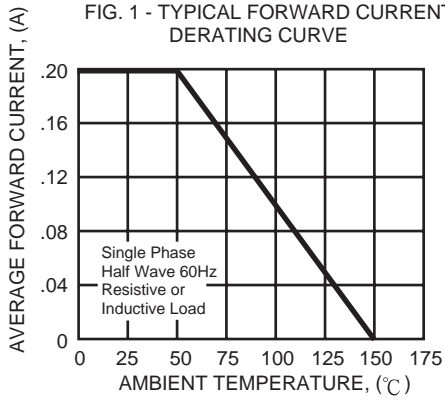


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

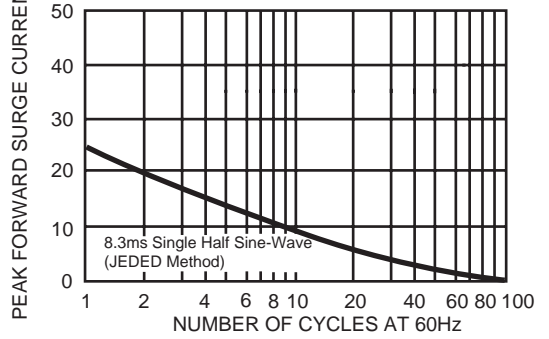


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

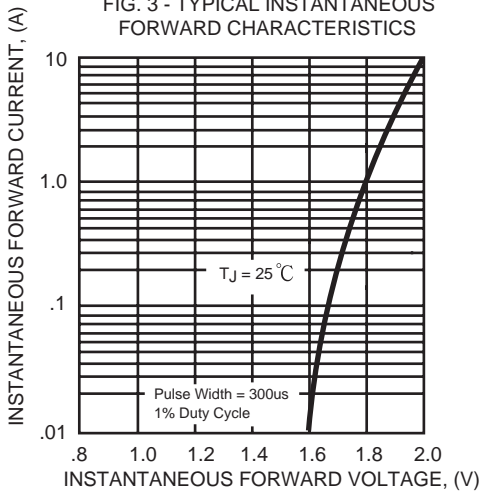
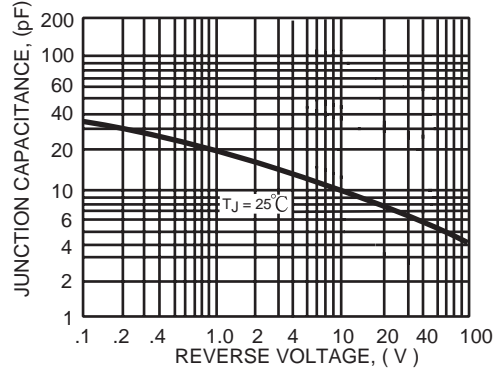
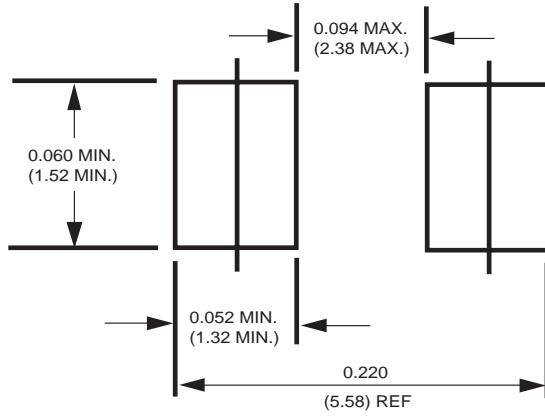


FIG. 4 - TYPICAL JUNCTION CAPACITANCE



## Mounting Pad Layout



Dimensions in inches and (millimeters)