

**SURFACE MOUNT SILICON RECTIFIER**

**VOLTAGE 3200 Volts CURRENT 0.2 Ampere**

**FEATURES**

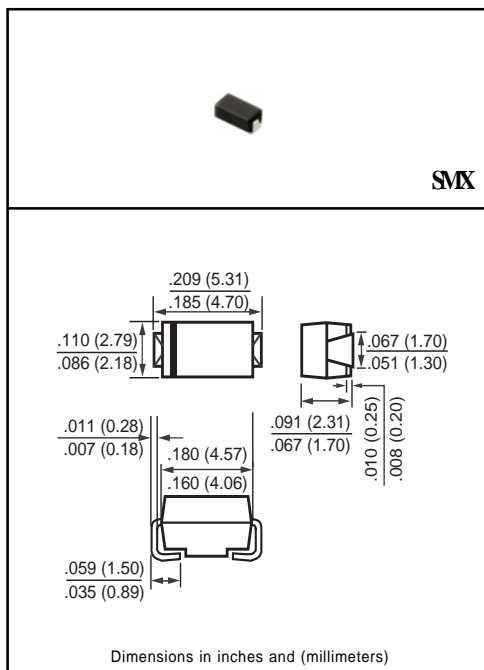
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.057 gram

**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

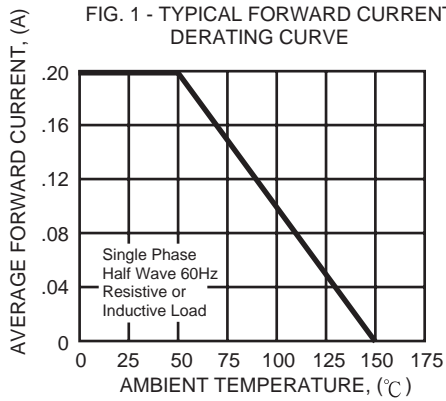


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

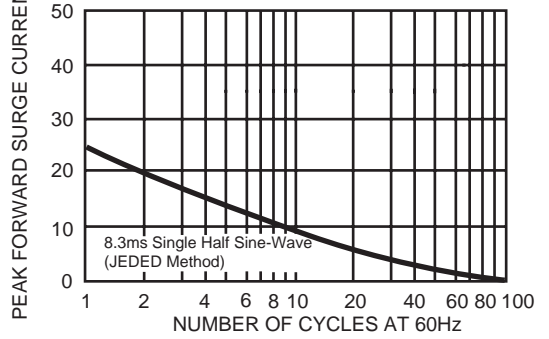


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

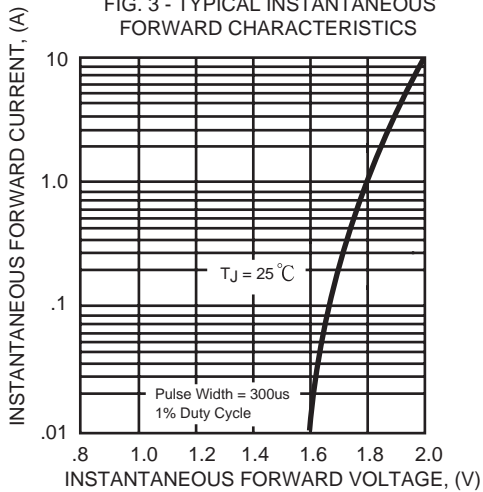
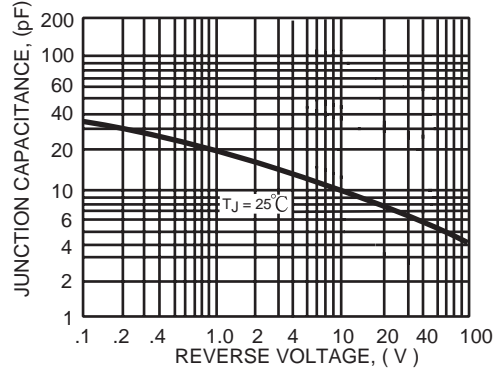
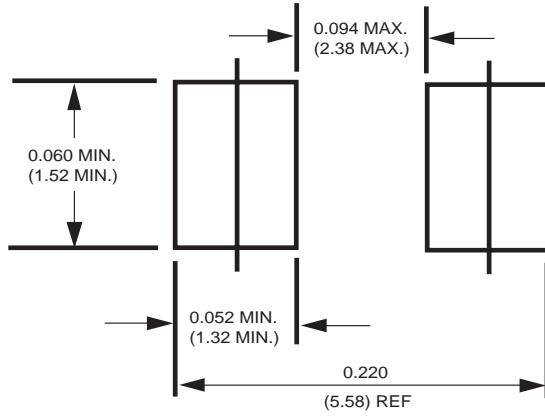


FIG. 4 - TYPICAL JUNCTION CAPACITANCE



## Mounting Pad Layout



Dimensions in inches and (millimeters)