

**SURFACE MOUNT**

**GLASS PASSIVATED SILICON RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes**

**FEATURES**

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

**MECHANICAL DATA**

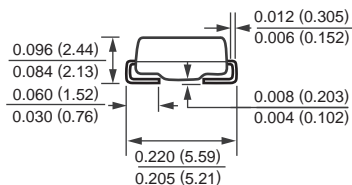
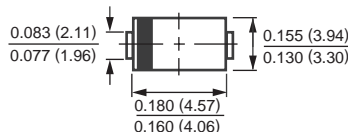
- \* Epoxy : Device has UL flammability classification 94V-0

**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       | FM201        | FM202 | FM203 | FM204 | FM205 | FM206 | FM207 | 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           | 2.0          |       |       |       |       |       |       | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM         | 50           |       |       |       |       |       |       | Amps  |
| Typical Thermaesistance   | (Note 2)RθJL | 20           |       |       |       |       |       |       | °C/W  |
|   | (Note 3)RθJA | 50           |       |       |       |       |       |       | °C/W  |
| Typical Junction Capacitance (Note 1)   | CJ           | 30           |       |       |       |       |       |       | pF    |
| Operating and Storage Temperature Range   | TJ,TSTG      | -55 to + 150 |       |       |       |       |       |       | °C    |

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

| CHARACTERISTICS  | SYMBOL       | FM201 | FM202 | FM203 | FM204 | FM205 | FM206 | FM207 | UNITS |       |
|--|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Instantaneous Forward Voltage at 2.0A DC             | VF           |       |       |       |       | 1.1   |       |       |       | Volts |
| Maximum Average Reverse Current at Rated DC Blocking Voltage | @ TA = 25°C  |       |       |       |       | 5.0   |       |       |       | uAmps |
|  | @ TA = 125°C |       |       |       |       | 125   |       |       |       | uAmps |

- NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
 2. Thermal resistance junction to terminal, 5X5mm<sup>2</sup> copper pads to each terminal.  
 3. Thermal resistance junction to ambient, 5X5mm<sup>2</sup> copper pads to each terminal.

# RATING AND CHARACTERISTIC CURVES ( FM201 THRU FM207 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

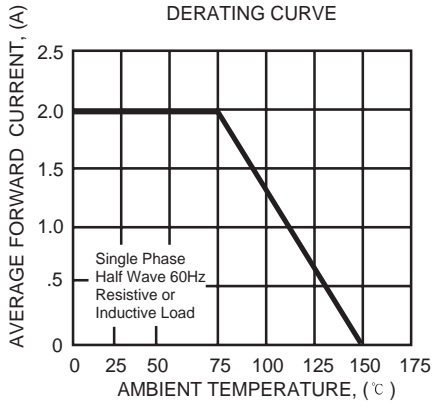


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

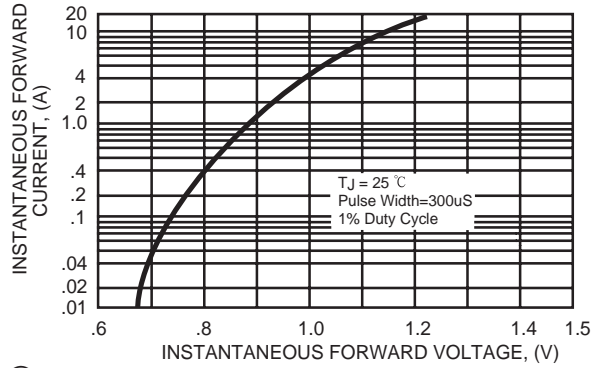


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

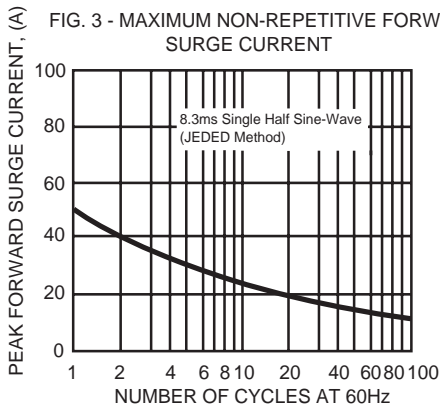


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

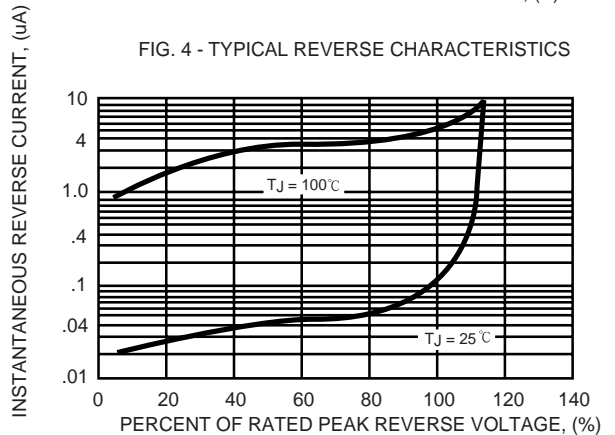


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

