

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

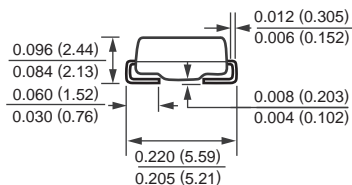
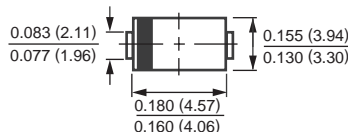
- * Epoxy : Device has UL flammability classification 94V-0

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 | 70 | | | | | | | 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 | -65 to + 175 | | | | | | | °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 = 100°C | 50 | | | | | | | uAmps |

- NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 2. Thermal resistance junction to terminal, 5X5mm² copper pads to each terminal.
 3. Thermal resistance junction to ambient, 5X5mm² copper pads to each terminal.

RATING AND CHARACTERISTIC CURVES (FM201 THRU FM207)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

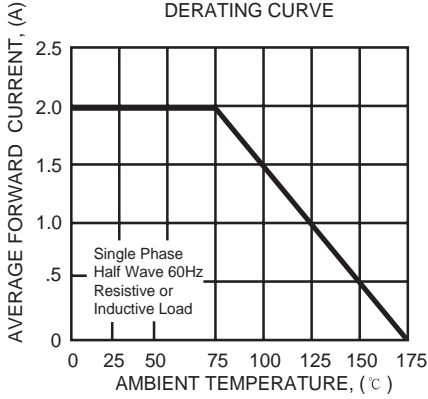


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

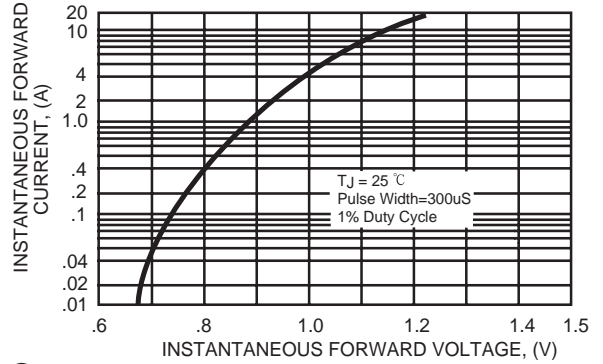


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

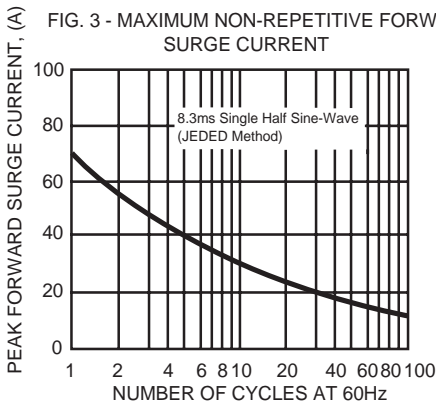


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

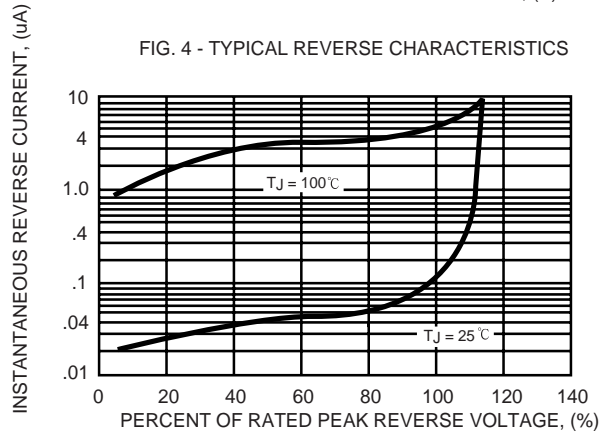


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

