

Surface Mount Standard Recovery

Glass Passivated Rectifiers

(Pb) Lead(Pb)-Free

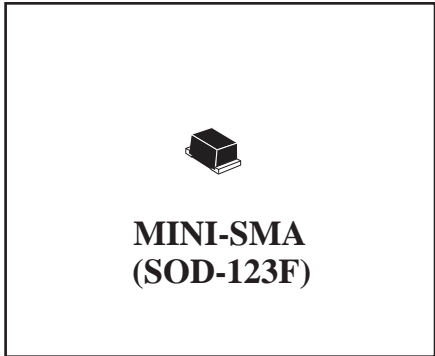
Features:

- *For Surface Mount Application
- *Glass Passivated Chip
- *Low Reverse Leakage Current
- *Low Forward Voltage Drop And High Current Capability
- *Plastic Material Has UL Flammability Classification 94V-0

Mechanical Data:

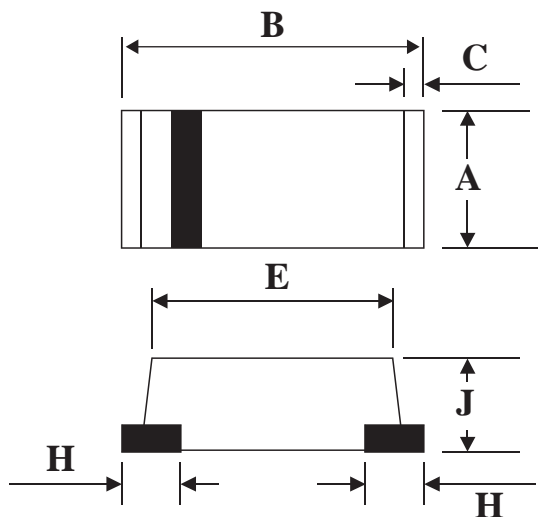
- * Case: Molded Plastic, MINI-SMA(Similar to SOD-123F)
- * Terminals: Solder Plated, Solderable per ML-STD-750 Method 2026
- * Polarity: Indicated by Cathode Band
- * Weight: 0.040 grams

**REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
1.0 AMPERE**



MINI-SMA Outline Dimension

unit:mm



| MINI-SMA | | |
|----------|------|-----------|
| Dim | Min | Max |
| A | 1.40 | 1.80 |
| B | 3.70 | 4.10 |
| C | - | 0.30(TYP) |
| E | 2.80 | 3.20 |
| H | - | 0.90(TYP) |
| J | 1.40 | 1.60 |

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.
For Capacitive Load, Derate Current by 20%.

| Characteristics | Symbol | FM | FM | FM | FM | FM | FM | FM | Unit |
|---|------------------|------------|-------|-------|-------|-------|-------|-------|------|
| | | 4001M | 4002M | 4003M | 4004M | 4005M | 4006M | 4007M | |
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @T _A =75°C | IF(AV) | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | IFSM | 30 | | | | | | | A |
| Maximum Instantaneous At 1.0A DC | VF | 1.10 | | | | | | | V |
| Maximum DC Reverse Current @T _A =25°C At Rated DC Blocking Voltage @T _A =100°C | IR | 5.0 50 | | | | | | | uA |
| Typical Junction Capacitance (Note 1) | C _J | 15(TYP) | | | | | | | Pf |
| Typical Thermal Resistance (Note 2) | R _{θJA} | 60(TYP) | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to+150 | | | | | | | °C |
| Storage Temperature Range | TSTG | -55 to+150 | | | | | | | °C |

NOTES: 1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to Ambient.

Device Marking

| Item | Marking | Item | Marking |
|---------|---------|---------|---------|
| FM4001M | A1 | FM4005M | A5 |
| FM4002M | A2 | FM4006M | A6 |
| FM4003M | A3 | FM4007M | A7 |
| FM4004M | A4 | | |

FIG.1-TYPICAL FORWARD CHARACTERISTICS

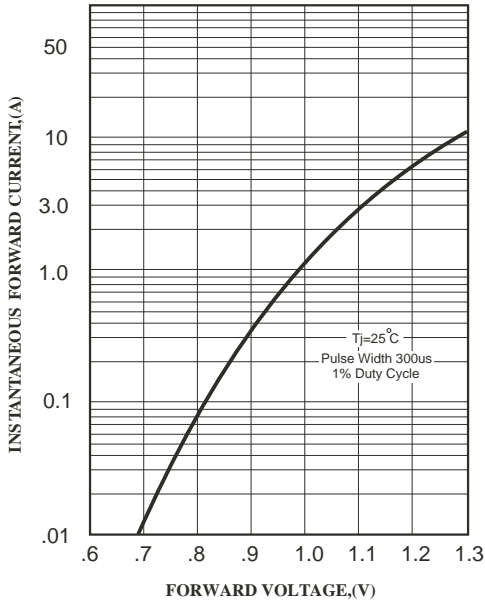


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

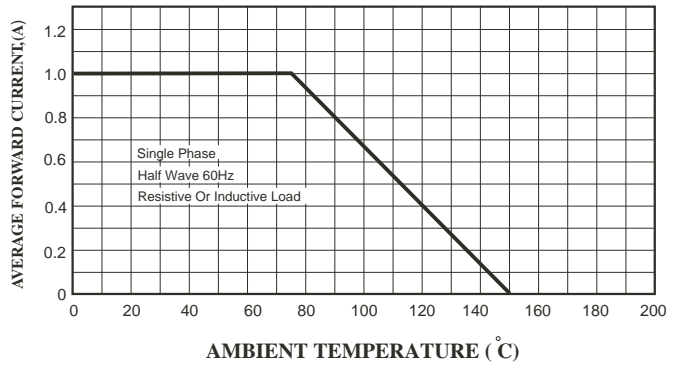


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

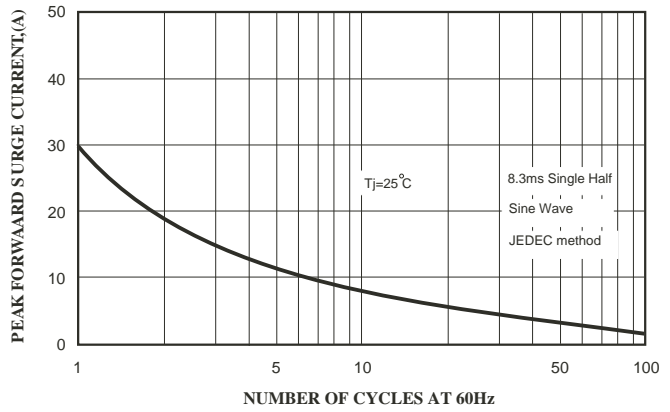


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

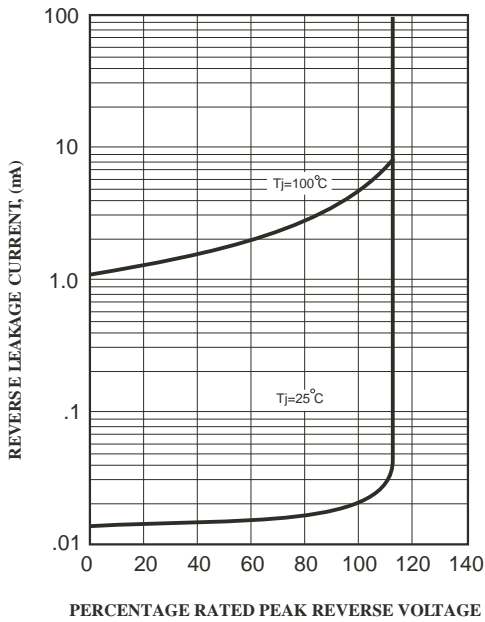


FIG.5-TYPICAL JUNCTION CAPACITANCE

