



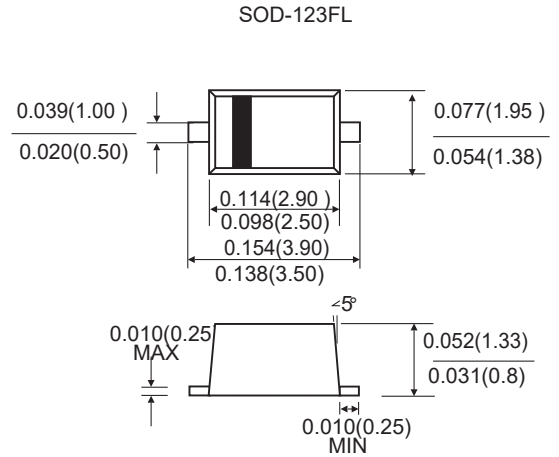
Silicon Rectifiers

A1 THRU A7 50 to 1000 V 1.0A

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O Utilizing Flame
- Retardant Epoxy Molding Compound.
- For surface mounted applications.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage current.

Mechanical Data

- Case : Molded plastic, JEDEC SOD-123FL
- Terminals : Solder plated, solderable per MIL-STD-750,
- Method 2026
- Polarity : Indicated by c athode band
- Mounting Position : Any



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

| Type Numbe And Device Marking | Symbol | A1 | A2 | A3 | A4 | A5 | A6 | A7 | Unit |
|---|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------|
| | | S1A FM4001 | S1B FM4002 | S1D FM4003 | S1G FM4004 | S1J FM4005 | S1K FM4006 | S1M FM4007 | |
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 800 | |
| Maximum Average Rectified Output Current @60Hz sine wave, Resistance load, T _a (Fig 1) | I _(AV) | 1.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 30 | | | | | | | A |
| Maximum Forward Voltage at I _(AV) and T _A =25°C | V _{FM} | 1.0 | | | | | | | V |
| Peak Reverse Current At Rated DC Blocking Voltage | I _{RM} | 10 500 | | | | | | | μA |
| Typical Junction Capacitance (Note 1) | C _j | 16 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) Between junction and ambient, On alumina substrate | R _{θJa} | 70 | | | | | | | °C/W |
| Typical Thermal Resistance (Note 2) Between junction and lead | R _{θJL} | 30 | | | | | | | °C/W |
| Typical Thermal Resistance (Note 2) Between junction and lcase | R _{θJc} | 40 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +150 | | | | | | | °C |

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
2. P.C.B. mounted with 0.2 X 0.2"(5.0 X 5.0mm)copper pad areas



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