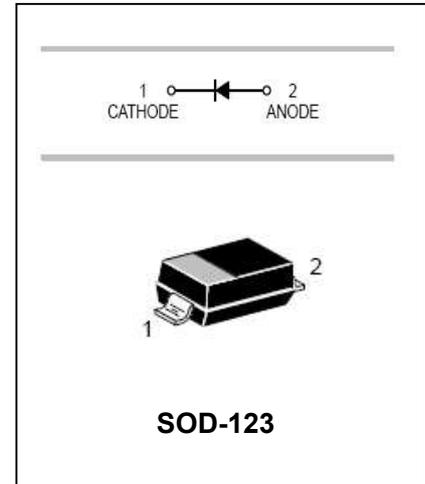


Fast Speed switching Diode

MMSD4148

FEATURES

- SOD-123 surface mount package.
- High breakdown voltage.
- Fast speed switching time.



APPLICATIONS

- Surface mount fast switching diode

ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| MMSD4148 | 5I | SOD-123 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|---|-----------------|------------|------|
| Maximum repetitive reverse Voltage | V_{RRM} | 100 | V |
| Average rectified forward current | $I_{F(AV)}$ | 215 | mA |
| Non-repetitive Peak Forward Surge Current | I_{FSM} | 1.0 | A |
| @t=1s @t=1μs | | 2.0 | |
| Power Dissipation | P_d | 400 | mW |
| Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 312 | °C/W |
| Operating and Storage Temperature Range | T_j, T_{STG} | -55 to+150 | °C |

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Characteristic | Symbol | Min | Max | Unit | Test Condition |
|---------------------------|-------------|-----|-----------------|----------------|--|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | 100 | - | V | $I_R=100\mu A$ |
| Forward Voltage | V_F | - | 1.0 | V | $I_F=10mA$ |
| Reverse Current | I_R | - | 25 5.0 50 | nA uA uA | $V_R=20V$ $V_R=75V$ $V_R=20V, T_j=150^\circ C$ |
| Diode Capacitance | C_D | - | 4.0 | pF | $V_R=0, f=1.0MHz$ |
| Reverse Recovery Time | t_{rr} | - | 4.0 | ns | $I_F=I_R=10mA$ |

Fast Speed switching Diode

MMSD4148

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

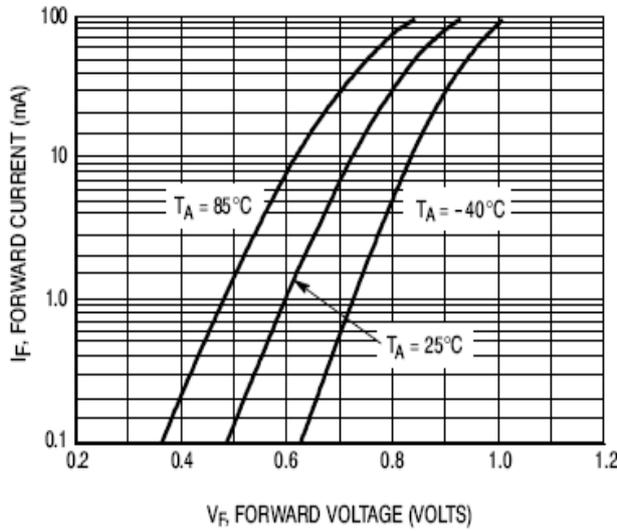


Figure 1. Forward Voltage

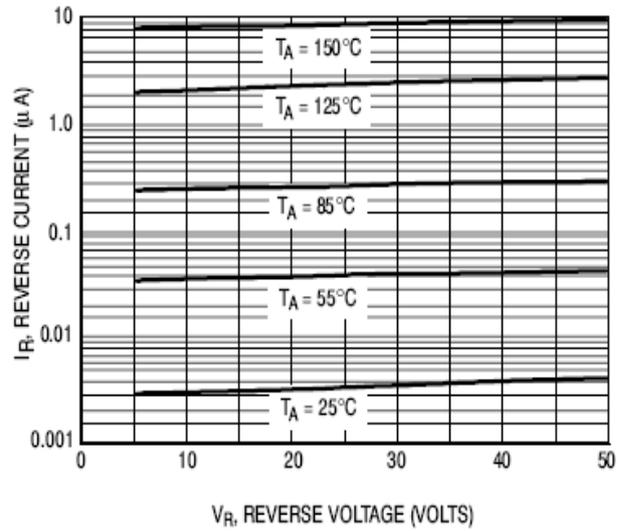


Figure 2. Leakage Current

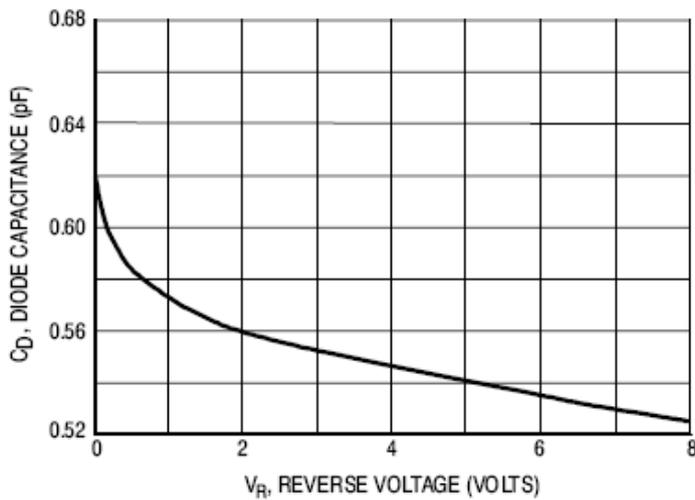


Figure 3. Capacitance

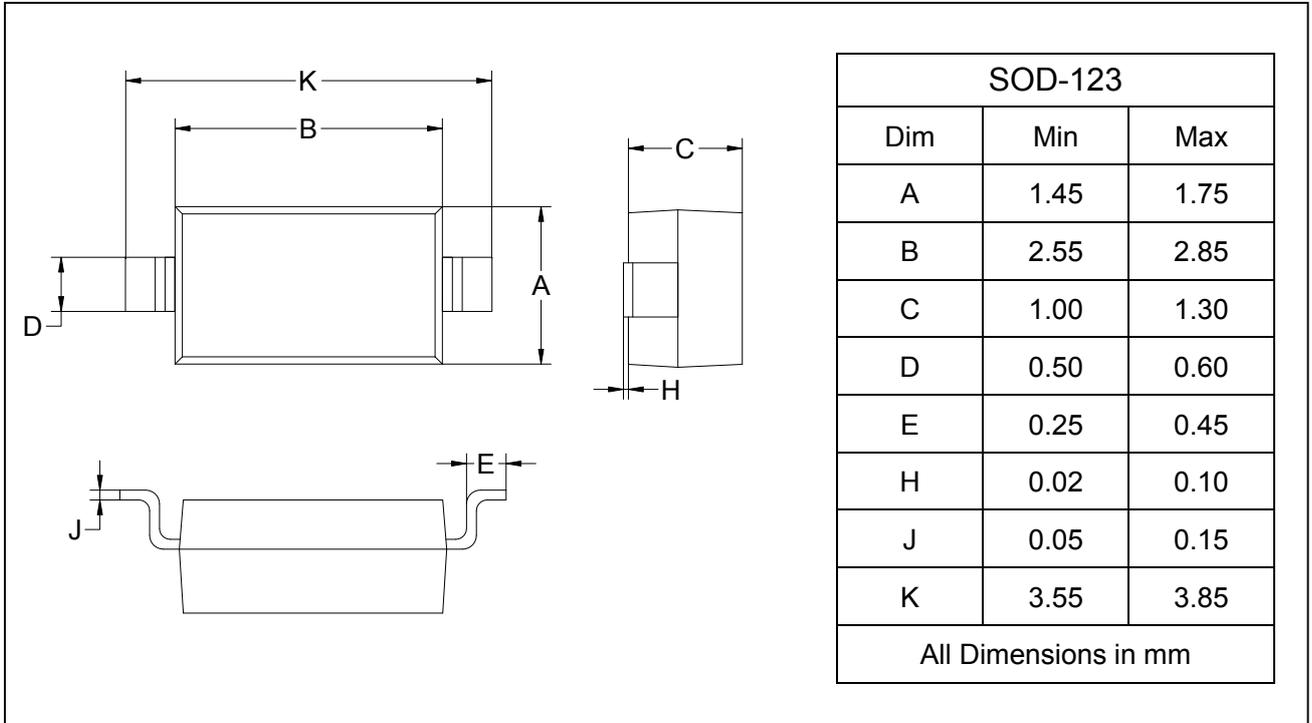
Fast Speed switching Diode

MMSD4148

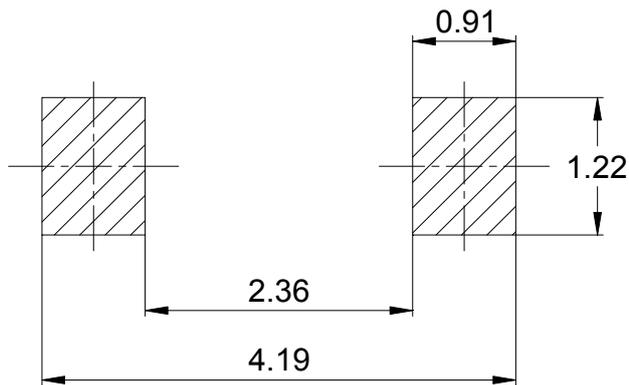
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

| Device | Package | Shipping |
|----------|---------|----------------|
| MMSD4148 | SOD-123 | 3000/Tape&Reel |