

1N4148W

SWITCHING DIODE

| | | | |
|---------|----------|-------|----------|
| VOLTAGE | 100 Volt | POWER | 350mWatt |
|---------|----------|-------|----------|

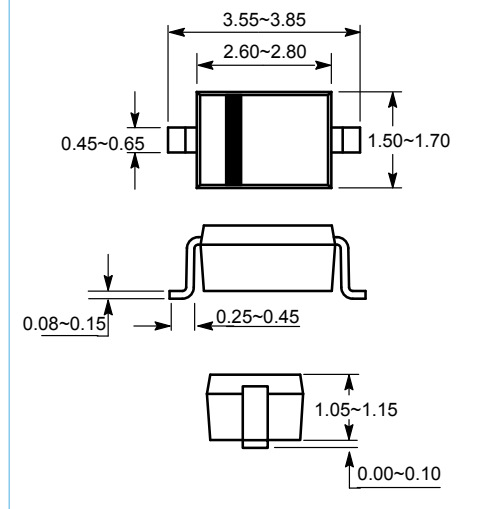
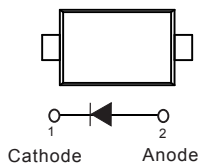
SOD-123 Unit:mm

FEATURES

- Fast switching devices
- RoHS compliant / Green EMC
- Matte Tin (Sn) Lead finish
- Cathode Band / Device marking
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|--|---------------------|-------------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Repetitive Peak Reverse Voltage | V _{RRM} | 100 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 75 | V |
| Forward Continuous Current | I _{FM} | 300 | mA |
| Average Rectified Output Current | I _O | 150 | mA |
| Non-Repetitive Peak Forward Surge Current (@t=1.0us) | I _{FSM} | 2.0 | A |
| Power Dissipation | P _D | 350 | mW |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature | T _{STG} | -55 to +150 | °C |

| Parameter | Conditions | Symbol | Min | Max | Unit |
|-----------------------|---|-----------------|-----|-------|------|
| Forward Voltage | I _F = 1mA | V _F | | 0.715 | V |
| | I _F = 10mA | | | 0.855 | V |
| | I _F = 50mA | | | 1.0 | V |
| | I _F = 150mA | | | 1.25 | V |
| Reverse current | V _R =75V T _J =25°C | I _R | | 1 | μA |
| | V _R = 20V T _J =25°C | | | 25 | nA |
| Capacitance | V _R = 0V, f = 1MHz | C _T | | 2 | pF |
| Reverse Recovery Time | I _F = I _R = 10mA, I _{RR} = 1mA, R _L = 100Ω | t _{rr} | | 4 | ns |

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RATING AND CHARACTERISTIC CURVES

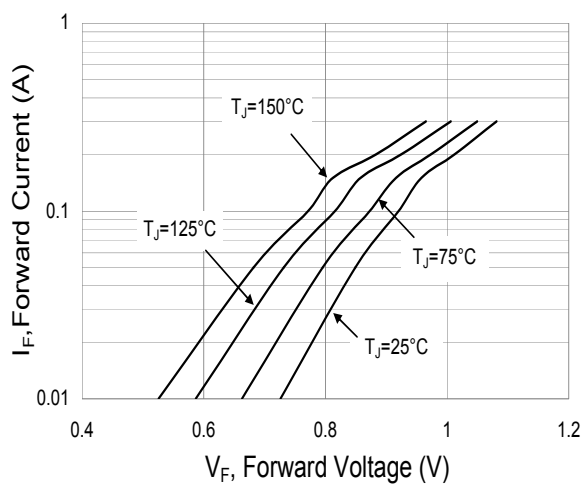


Fig.1 Typical Forward Characteristics

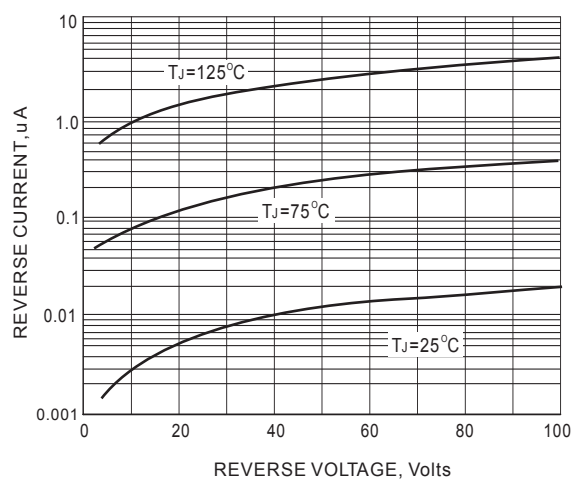


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

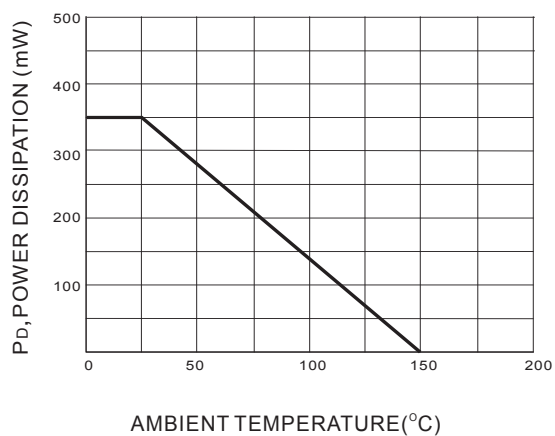


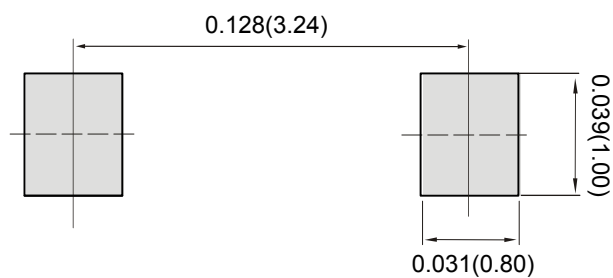
FIG.3 POWER DERATING CURVE

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MOUNTING PAD LAYOUT

SOD-123

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

| | |
|----------------|-------------------|
| 1N4148W | Packing Quantity |
| Tape&Reel | 7inch; 3Kpcs/Reel |
| Bulk(Tube/Box) | N/A |