



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N4148WS

1N4448WS

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SWITCHING DIODE

VOLTAGE - 100 Volts

CURRENT - 0.15 Ampere

FEATURES

- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage drop
- * High speed switching
- * High current capability
- * High reliability

MECHANICAL DATA

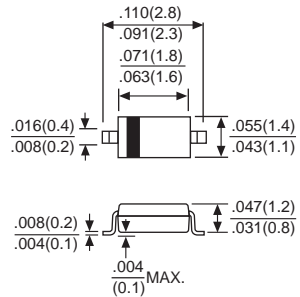
- * Case: Molded plastic
- * Epoxy: UL94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- * Mounting position: Any
- * Weight: 0.008 grams Approx.

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%.



SOD-323



Dimensions in inches(millimeters)

| | SYMBOL | 1N4148WS | 1N4448WS | UNITS |
|---|---------|------------|---------------------------|-------|
| Maximum Reverse Voltage | VR | | 75 | V |
| Maximum Non-Reprtitive Peak Reverse Voltage | VRM | | 100 | V |
| Maximum Average Rectified Current | Io | | 150 | mA |
| Peak Forward Surge Current @T=1μs | IFSM | 2.0 | 4.0 | A |
| Maximum Power Dissipation @TA=25°C | Ptot | | 200 | mW |
| Maximum Forward Voltage | VF | 1.0 / 50mA | 0.72 / 5mA 1.0 / 100mA | V |
| Maximum Reverse Current (@VR=VR Max, TA=25°C) | IR | | 5.0 | μA |
| Maximum Reverse Recovery Time(Note 1) | trr | | 4.0 | ns |
| Typical Junction Capacitance(Note 2) | CJ | | 4.0 | pF |
| Typical Thermal Resistance | RθJA | | 635 | °C/W |
| Operating and Storage Temperature Range | TJ,TSTG | | -55 to +125 | °C |

Note: 1. Test conditions: IF=IR=10mA, RL=100Ω, measured at IR=1mA
 2. Measured at 1MHz and VR=0

RATING AND CHARACTERISTIC CURVES (1N4148WS AND 1N4448WS)

FIG.1 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

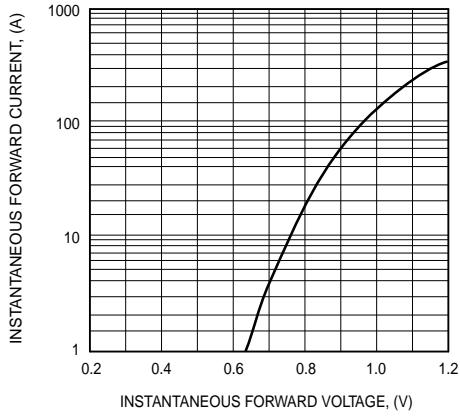


FIG.2 - TYPICAL REVERSE CHARACTERISTICS

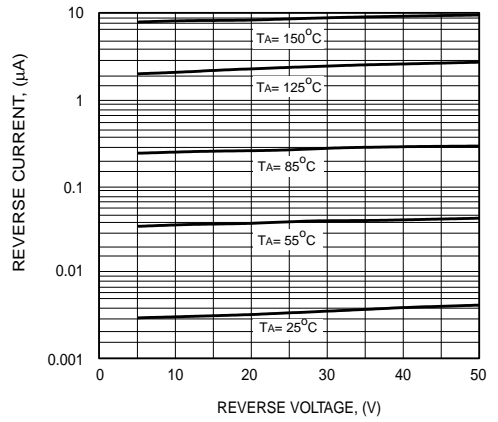
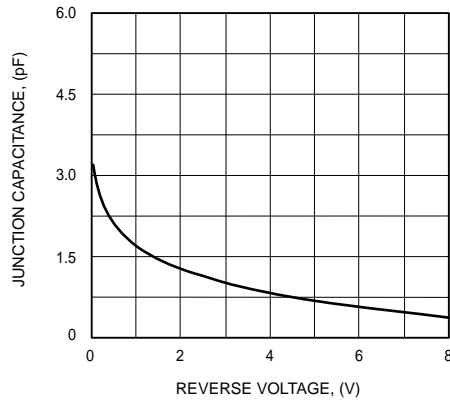


FIG.3 - TYPICAL JUNCTION CAPACITANCE



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