



1N4448WX

High Speed Switching Diode 200mW

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Fast Switching Speed
- Ultra Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

- Case: SOD-323, Molded Plastic
- Polarity: Indicated by Cathode Band
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking : T5

Maximum Ratings @ 25°C Unless Otherwise Specified

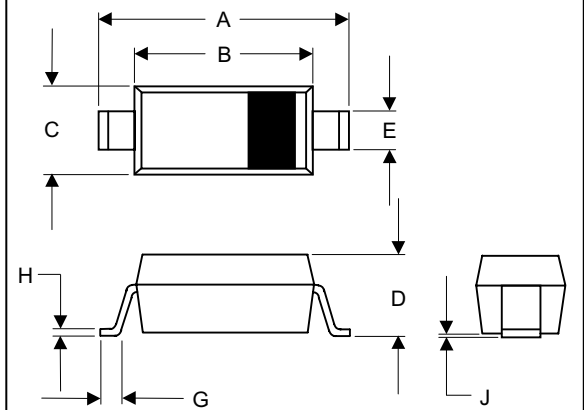
| Characteristic | Symbol | Value | Unit |
|------------------------------------|-----------------|-------------|------|
| Non-Repetitive Peak Reverse Volt. | V_{RM} | 100 | V |
| Peak Repetitive Reverse Voltage | V_{RRM} | | |
| Working Peak Reverse Voltage | V_{RWM} | 75 | V |
| DC Blocking Voltage | V_R | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 53 | V |
| Forward Continuous Current(Note 1) | I_{FM} | 500 | mA |
| Average Rectified Output Current | I_o | 250 | mA |
| Non-Repetitive Peak @ $t=1.0\mu s$ | I_{FSM} | 4 | A |
| Forward Surge Current @ $t=1.0s$ | | 2 | A |
| Power Dissipation(Note 1) | P_d | 200 | mW |
| Thermal Resistance(Note 1) | $R_{\theta JA}$ | 625 | K/W |
| Operation/Storage Temp. Range | T_j, T_{STG} | -65 to +150 | °C |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Charateristic | Symbol | Max | Unit | Test Cond. |
|------------------------------|----------|-------|---------|--|
| Maximum Forward Voltage Drop | V_{FM} | 0.720 | V | $I_F=5.0mA$ |
| | | 0.855 | | $I_F=10mA$ |
| | | 1 | | $I_F=100mA$ |
| | | 1.25 | | $I_F=150mA$ |
| Maximum Peak Reverse Current | I_{RM} | 2.5 | μA | $V_R=75V$ |
| | | 50 | | $V_R=75V T_j=150^\circ C$ |
| | | 30 | | $V_R=25V T_j=150^\circ C$ |
| | | 25 | | $V_R=20V$ |
| Junction Capacitance | C_j | 4 | pF | $V_R=0V, f=1.0MHz$ |
| Reverse Recovery Time | t_{rr} | 4 | ns | $I_F=I_R=10mA, I_{rr}=0.1I_R, R_L=100 OHM$ |

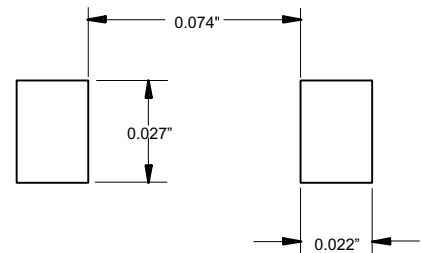
Notes: 1. Valid provided that terminals are kept at ambient temperature

SOD-323



| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .090 | .107 | 2.30 | 2.70 | |
| B | .063 | .071 | 1.60 | 1.80 | |
| C | .045 | .053 | 1.15 | 1.35 | |
| D | .031 | .045 | 0.80 | 1.15 | |
| E | .010 | .016 | 0.25 | 0.40 | |
| G | .004 | .018 | 0.10 | 0.45 | |
| H | .004 | .010 | 0.10 | 0.25 | |
| J | ----- | .006 | ----- | 0.15 | |

SUGGESTED SOLDER PAD LAYOUT



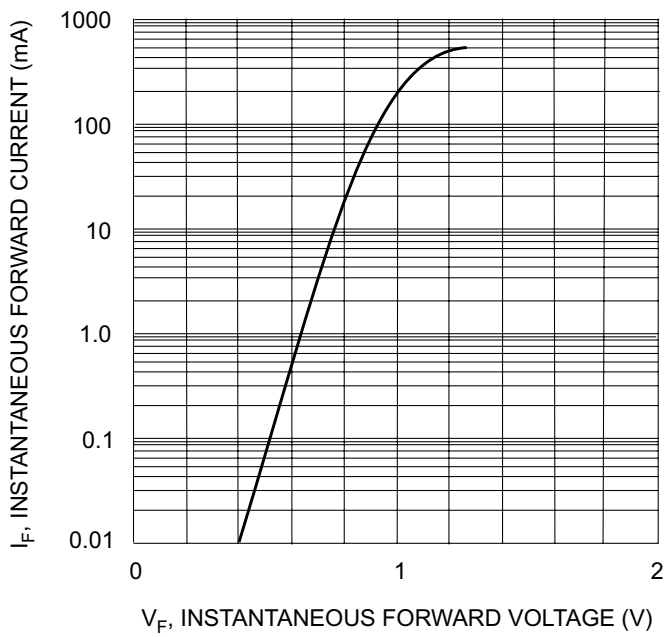


Fig. 1 Forward Characteristics

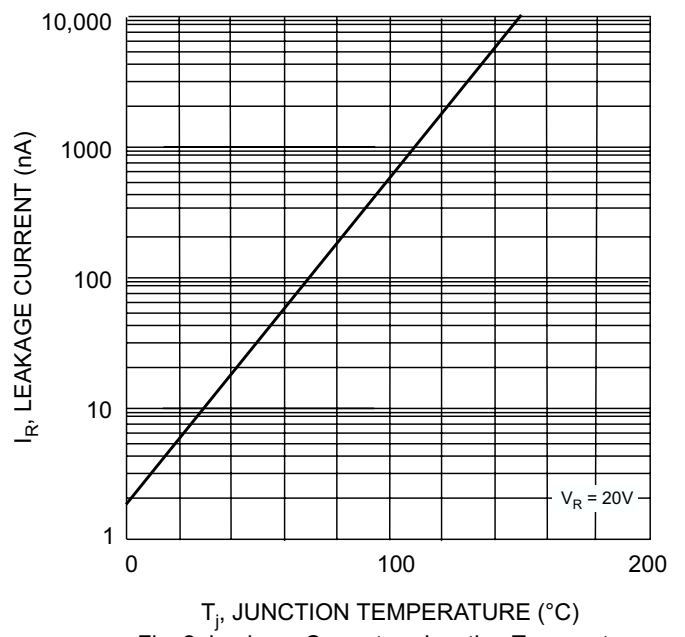


Fig. 2 Leakage Current vs Junction Temperature



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Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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