



Micro Commercial Components
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1N4448X

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- Surface Mount Package Ideally Suited for Automatic Insertion
- Marking Code: T5
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

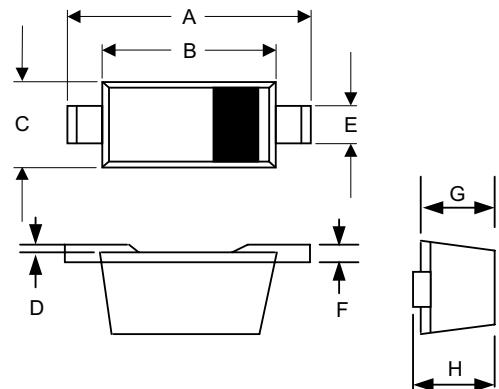
| Symbol | Rating | Rating | Unit |
|-----------------|---------------------------------------------------|-------------|--------------|
| V_{RM} | Non-Repetitive Peak Reverse Voltage | 100 | V |
| V_{RRM} | Peak Repetitive Reverse Voltage | | |
| V_{RWM} | Working Peak Reverse Voltage | 75 | V |
| V_R | DC Blocking Voltage | | |
| I_{FM} | Forward Continuous Current | 500 | mA |
| I_o | Average Rectified Output Current | 250 | mA |
| I_{FSM} | Peak Forward Surge Current @ 1.0 μ s @1.0s | 4.0 2.0 | A |
| $R_{\theta JA}$ | Thermal Resistance Junction to Ambient | 625 | $^{\circ}$ W |
| P_D | Power dissipation | 150 | mW |
| T_J, T_{STG} | Operating and Storage Junction Temperature | -65 to +150 | $^{\circ}$ C |

Electrical Characteristics @ 25°C Unless Otherwise Specified

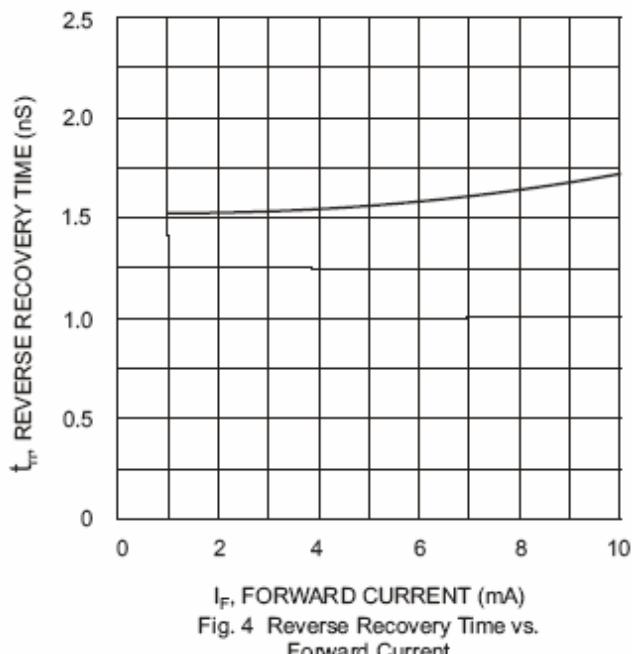
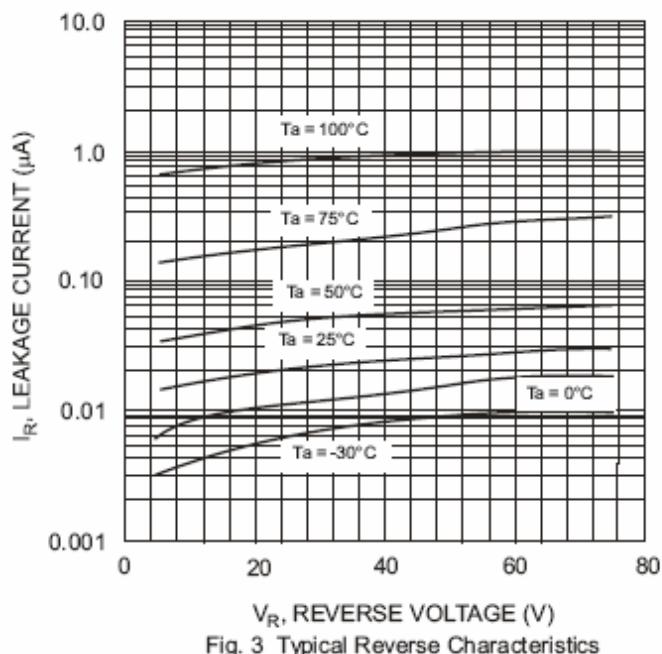
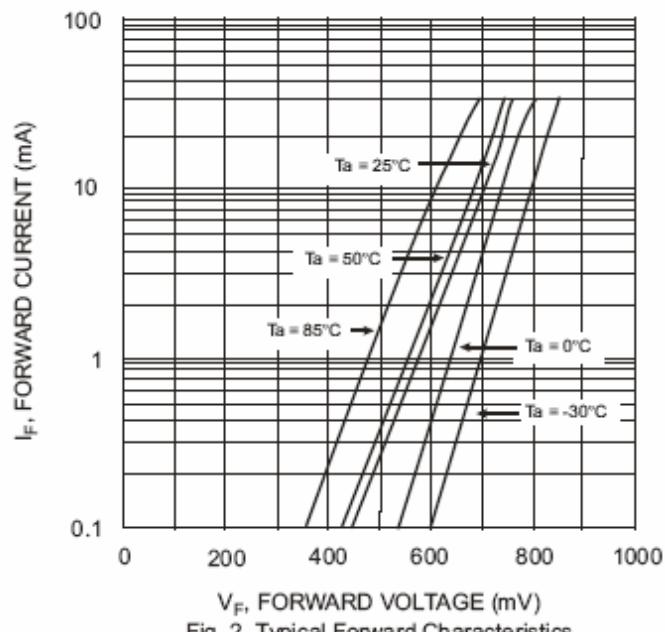
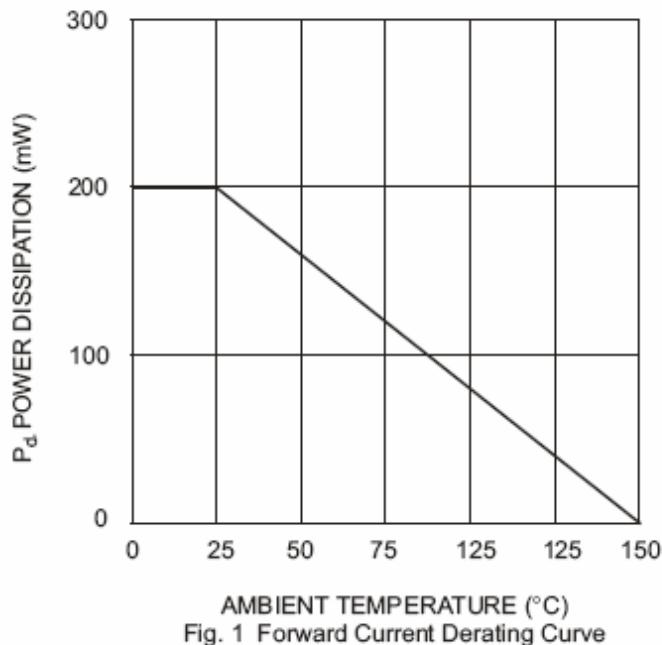
| Symbol | Parameter | Min | Max | Test Conditions |
|------------|---------------------------------|----------------------------|----------------------------------|-------------------------------------------------------|
| $V_{(BR)}$ | Reverse Breakdown Voltage | 75V | --- | $I_R=10 \mu A$ |
| I_R | Reverse Voltage Leakage Current | --- | 2.5 μ A 25nA | $V_R=75V$ $V_R=20V$ |
| V_F | Forward Voltage | 0.62V --- --- --- | 0.72V 0.855V 1.0V 1.25V | $I_F=5mA$ $I_F=10mA$ $I_F=100mA$ $I_F=150mA$ |
| C_T | Total Capacitance | --- | 4.0pF | $V_R=0V, f=1MHz$ |
| t_{rr} | Reverse Recovery Time | --- | 4.0ns | $I_R=I_F=10mA, R_L=100 \Omega$, Rec. to 1.0mA |

**150mW
Switching Diodes**

SOD523



| DIMENSIONS | | | | | |
|------------|--------|------|------|------|------|
| DIM | INCHES | | MM | | NOTE |
| | MIN | MAX | MIN | MAX | |
| A | .059 | .067 | 1.50 | 1.70 | |
| B | .043 | .051 | 1.10 | 1.30 | |
| C | .030 | .033 | 0.75 | 0.85 | |
| D | .001 | .003 | 0.01 | 0.07 | |
| E | .010 | .014 | 0.25 | 0.35 | |
| F | .003 | .006 | 0.08 | 0.15 | |
| G | .020 | .028 | 0.50 | 0.70 | |
| H | .020 | .031 | 0.51 | 0.77 | |



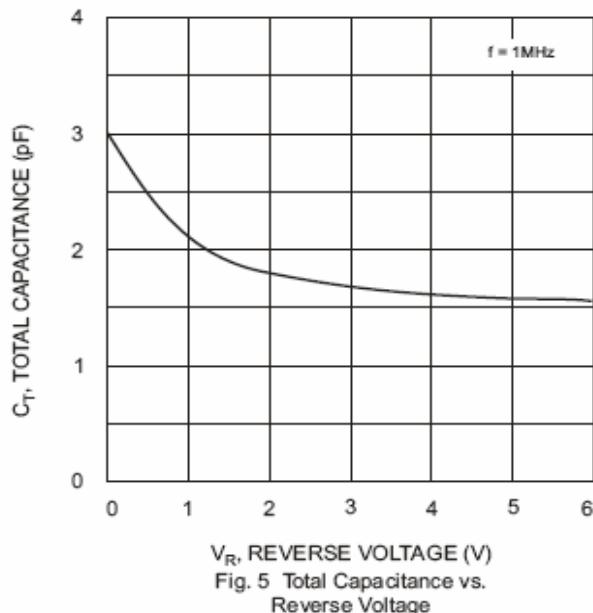


Fig. 5 Total Capacitance vs.
Reverse Voltage

Ordering Information :

| Device | Packing |
|----------------|------------------------|
| Part Number-TP | Tape&Reel: 8 Kpcs/Reel |

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

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