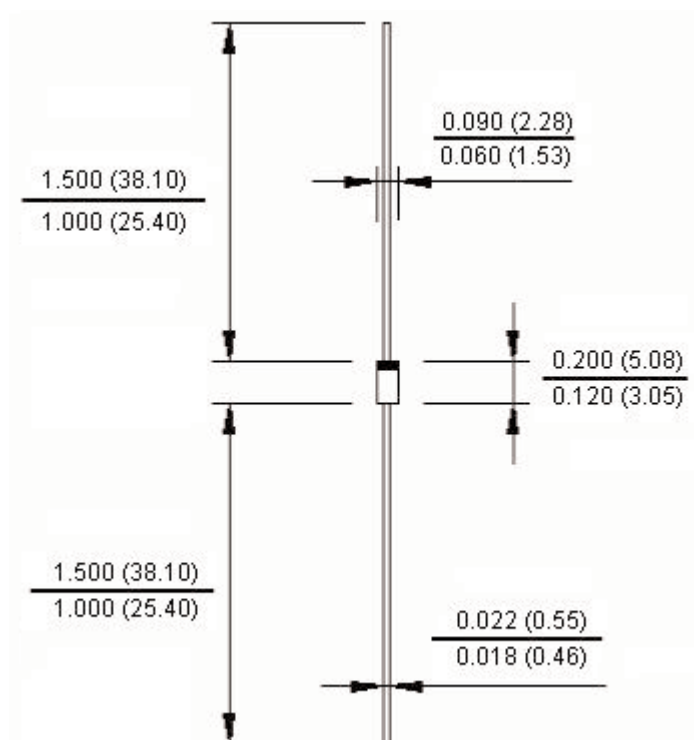




**RoHS  
Compliant**

**Features:**

- Fast switching device ( $T_{RR} < 4.0\text{nS}$ ).
- DO-35 package (JEDEC).
- Through-hole device type mounting.
- Hermetically sealed glass.
- Compression bonded construction.
- All external surface are corrosion resistant and leads are readily solderable.
- RoHS compliant.
- Solder hot dip tin(Sn) lead finish.
- Cathode indicated by polarity band.

**DO-35**

Dimensions : Inches (Millimetres)



## Maximum Ratings at Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

### Maximum Ratings

| Type Number                         | Symbol       | Value        | Units |
|-------------------------------------|--------------|--------------|-------|
| Power Dissipation                   | $P_d$        | 500          | mW    |
| Working Inverse Voltage             | $W_{IV}$     | 75           | V     |
| Non-repetitive Peak Forward Current | $I_{FM}$     | 450          | mA    |
| Average Rectified Current           | $I_o$        | 150          |       |
| Peak Forward Surge Current          | $I_{FSURGE}$ | 2            | A     |
| Operating Junction Temperature      | $T_J$        | 175          | °C    |
| Storage Temperature Range           | $T_{STG}$    | -65 to + 200 |       |

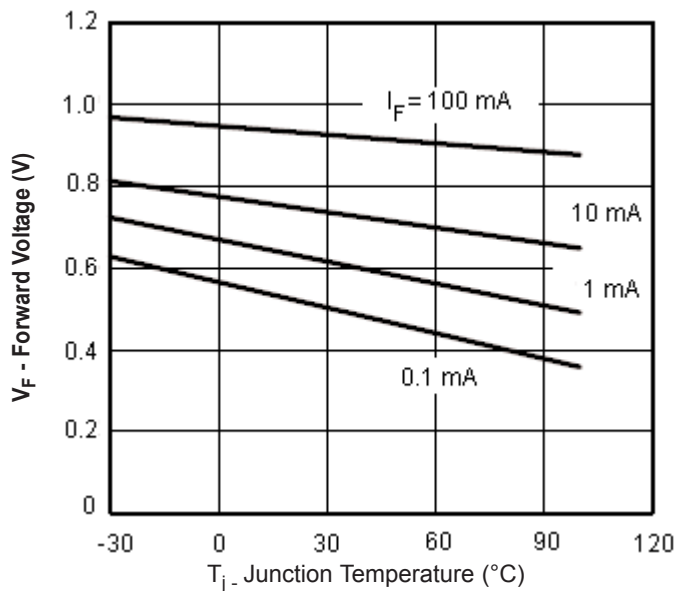
### Electrical Characteristics

| Type Number                                                                                   | Symbol   | Minimum   | Maximum     | Units         |
|-----------------------------------------------------------------------------------------------|----------|-----------|-------------|---------------|
| Breakdown Voltage<br>$I_R = 100\mu A$<br>$I_R = 5\mu A$                                       | $B_V$    | 100<br>75 | -           | V             |
| Forward Voltage<br><b>1N4448,</b> 1N914B $I_F = 5.0mA$<br><b>1N4448,</b> 1N914B $I_F = 100mA$ | $V_F$    | 0.62<br>- | 0.72<br>1.0 |               |
| Reverse Leakage Current<br>$V_R = 20V$<br>$V_R = 75V$                                         | $I_R$    | -         | 25<br>5     | nA<br>$\mu A$ |
| Junction Capacitance $V_R = 0, f = 1.0MHz$                                                    | $C_j$    | -         | 4.0         | pF            |
| Reverse Recovery Time (Note 1)                                                                | $t_{rr}$ | -         |             | nS            |

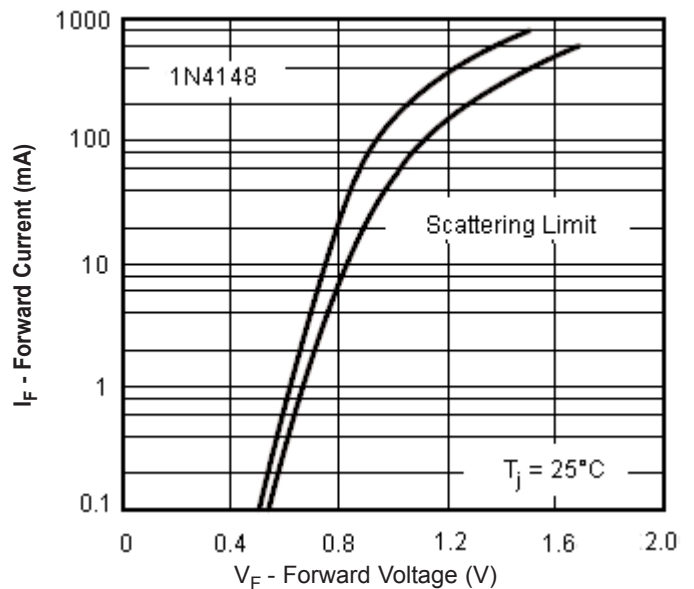
Notes: 1. Reverse Recovery Test Conditions:  $I_F = 10mA$ ,  $V_R = 6V$ ,  $R_L = 100\Omega$ ,  $I_{RR} = 1mA$

## Ratings and Characteristic Curves (1N4448)

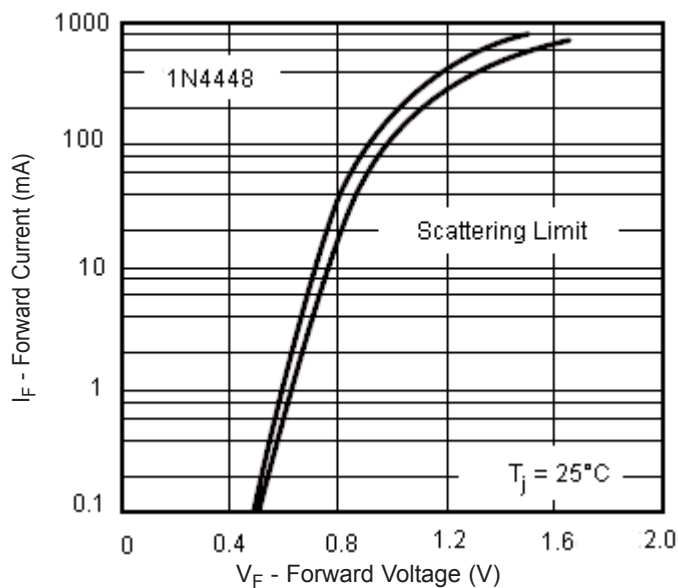
Forward Voltage vs. Junction Temperature



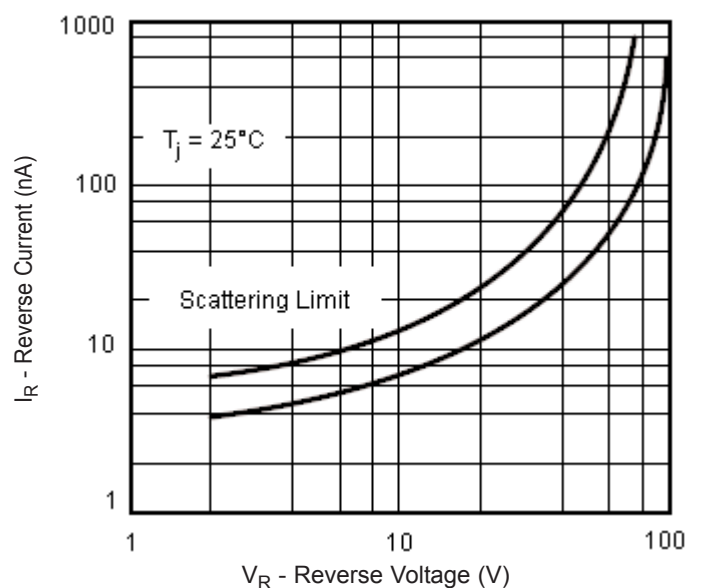
Forward Current vs. Forward Voltage



Forward Current vs. Forward Voltage



Reverse Current vs. Reverse Voltage



## Part Number Table

| Description              | Part Number |
|--------------------------|-------------|
| Diode, High Speed, DO-35 | 1N4448      |

**Notes:****International Sales Offices:**

|                                                                                    |                                                                                           |                                                                                     |                                                                                         |                                                                                     |                                                                                          |                                                                                                                                                                                                                        |                                                                                  |
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