

## 500 mW DO-34 Hermetically Sealed Glass Fast Switching Diodes



AXIAL LEAD  
DO34

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

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

These ratings are limiting values above which the serviceability of the diode may be impaired.

### Specification Features:

- Fast Switching Device ( $T_{RR} < 4.0 \text{ nS}$ )
- DO-34 Package (JEDEC DO-204)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and leads are readily solderable
- Cathode indicated by polarity band

DEVICE MARKING DIAGRAM  
(1N4148M)



DEVICE MARKING DIAGRAM  
(1N4448M / 1N914B)



Device Code : 1NxxxxM



ELECTRICAL SYMBOL

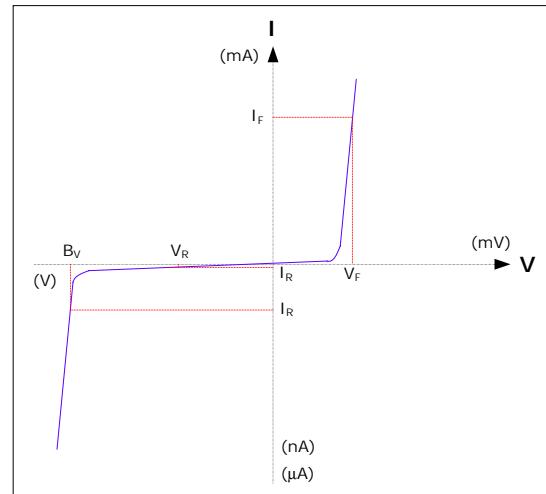
### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
$B_v$	Breakdown Voltage	$I_R=100\mu\text{A}$ $I_R=5\mu\text{A}$	100		Volts
$I_R$	Reverse Leakage Current	$V_R=20\text{V}$ $V_R=75\text{V}$		25 5	nA μA
$V_F$	Forward Voltage 1N4448M, 1N914BM 1N4148M 1N4448M, 1N914BM	$I_F=5\text{mA}$ $I_F=10\text{mA}$ $I_F=100\text{mA}$	0.62	0.72 1.0 1.0	Volts
$T_{RR}$	Reverse Recovery Time	$I_F=I_R=10\text{mA}$ $R_L=100\Omega$ $I_{RR}=1\text{mA}$		4	nS
$C$	Capacitance	$V_R=0\text{V}, f=1\text{MHz}$		4	pF

### Electrical Symbol Definition

Symbol	Parameter
$B_V$	Breakdown Voltage @ $I_R$
$I_R$	Reverse Leakage Current @ $V_R$
$V_R$	Reverse Voltage
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$

### Typical Characteristics



### Axial-Lead Tape Packaging Standards

This axial-lead component's packaging requirements use in automatic testing and assembly equipment. And this standard practices for lead-tape packaging of axial-lead components meets the requirements of EIA Standard RS-296-D "Lead-taping of Components on Axial Lead Configuration for Automatic Insertion".