



# SEMICONDUCTOR

## TECHNICAL SPECIFICATION

# MCL4448

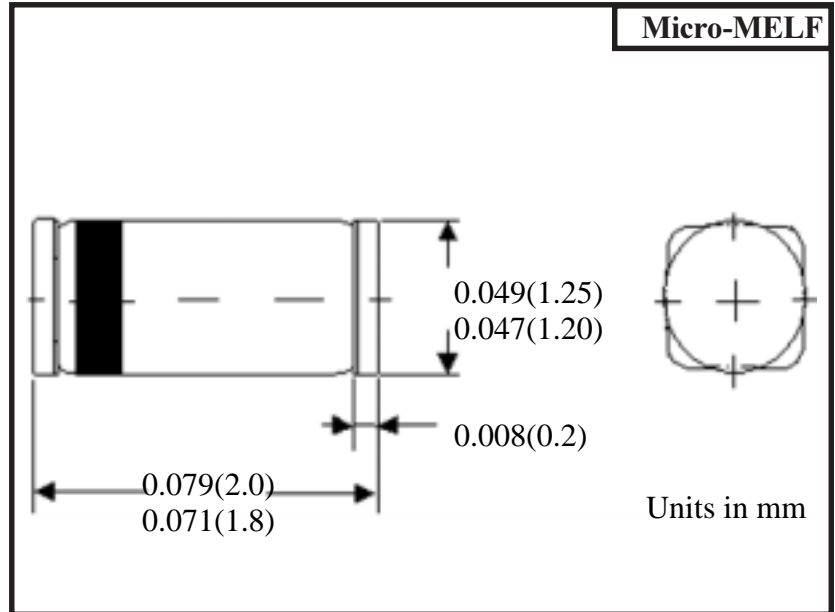
### 1N4448 Micro-MELF SIGNAL DIODE

#### Absolute Maximum Ratings (Ta = 25°C)

ITEMS	Symbol	Ratings	Unit
Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Recovery Time	$t_{rr}$	4	ns
Power Dissipation	P	500	mW
Forward Current	$I_{FM}$	500 *	mA
Junction Temp.	$T_J$	(-65 to 175)	°C
Storage Temp.	$T_{stg}$	(-65 to 175)	°C

#### Mechanical Data

Items	Materials
Package	Micro MELF
Case	Hermetically sealed glass
Lead/Finish	Double stud/Solder Plating
Chip	Glass Passivated



Ratings	Symbol	Ratings	Unit
Non-Repetive Peak Reverse Voltage	$V_{RM}$	100	V
Minimum Breakdown Voltage @ $I_R = 100\text{mA}$	$B_V$	75	V
Peak Forward Surge Current @ $t = 1.0\text{s}$	$I_{FSM}$	1 *	A
Forward Continuous Current	$I_{FM}$	500 *	mA
Maximum Forward Voltage $I_F = 100\text{mA}$	$V_F$	1	V
Maximum Reverse Current	$I_R$	$V_R = 20\text{V}$	25 nA
		$V_R = 75\text{V}$	5 $\mu\text{A}$
		$V_R = 20\text{V}, T_j = 150^\circ\text{C}$	30 $\mu\text{A}$
Maximum Junction Capacitance	$C_j$	4	pF
Maximum Reverse Recovery Time	$t_{rr}$	4	ns
		$I_F = 10\text{mA}, V_R = 6\text{V}, I_R = -1\text{mA}, R_L = 100\Omega$	
Maximum Thermal Resistance	$R_{\theta JA}$	300	K / W

\* Note: Device terminals at ambient temperature