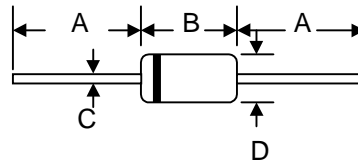
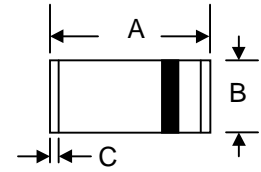


### Features

- Fast Switching Speed
- Glass Package Version for High Reliability
- High Conductance
- Available in Both Through-Hole and Surface Mount Versions



1N4148



LL4148

### Mechanical Data

- Case: DO-35, MiniMELF
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: DO-35 0.13 grams  
MiniMELF 0.05 grams
- Marking: Cathode Band Only
- **Lead Free: For RoHS / Lead Free Version,**

DO-35		
Dim	Min	Max
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

MiniMELF		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

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

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (Note 1)	$I_{FM}$	300	mA
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50\text{MHz}$ (Note 1)	$I_o$	150	mA
Non-Repetitive Peak Forward Surge Current @ $t = 1.0\text{s}$ @ $t = 1.0\mu\text{s}$	$I_{FSM}$	1.0 2.0	A
Power Dissipation (Note 1) Derate Above $25^\circ\text{C}$	$P_d$	500 1.68	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +175	$^\circ\text{C}$

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**Electrical Characteristics** @ $T_A=25^\circ\text{C}$  unless otherwise specified

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Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	$V_{FM}$	—	1.0	V	$I_F = 10\text{mA}$
Maximum Peak Reverse Current	$I_{RM}$	—	5.0	$\mu\text{A}$	$V_R = 75\text{V}$ $V_R = 70\text{V}, T_j = 150^\circ\text{C}$ $V_R = 20\text{V}, T_j = 150^\circ\text{C}$ $V_R = 20\text{V}$
			50	$\mu\text{A}$	
			30	$\mu\text{A}$	
			25	nA	
Capacitance	$C_j$	—	4.0	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	—	4.0	ns	$I_F = 10\text{mA}$ to $I_R = 1.0\text{mA}$ $V_R = 6.0\text{V}, R_L = 100\Omega$

Note: 1. Diode on Ceramic Substrate 10mm x 8mm x 0.7mm.

## Typical Characteristics Curves

Fig.1- Power Derating Curve

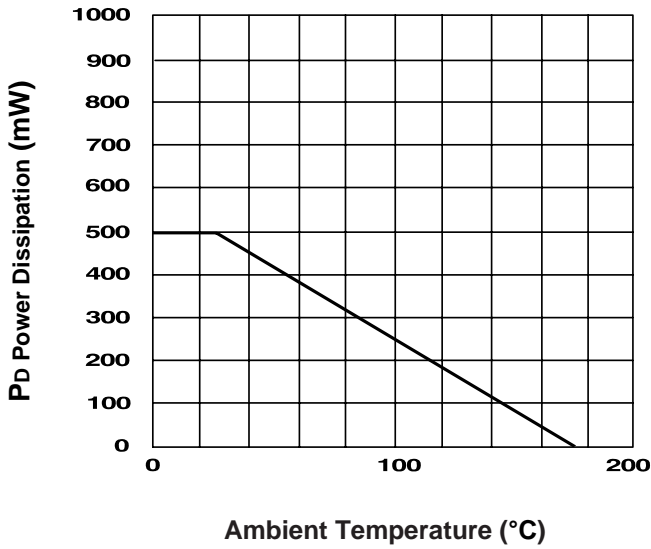


Fig.2- Typical Forward Characteristics

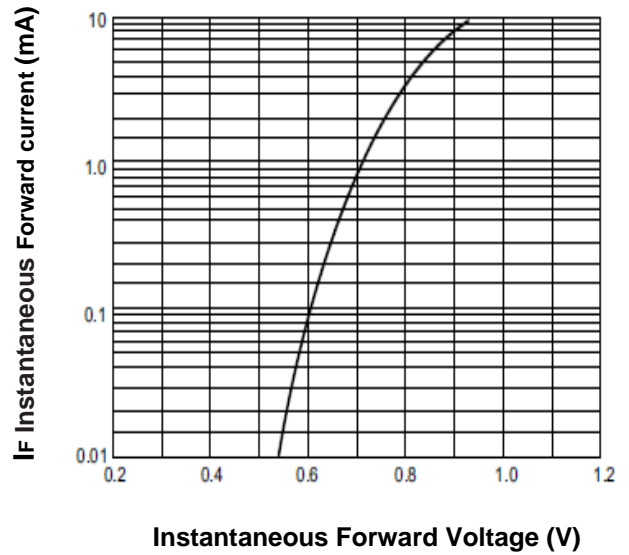


Fig.3- Typical junction capacitance

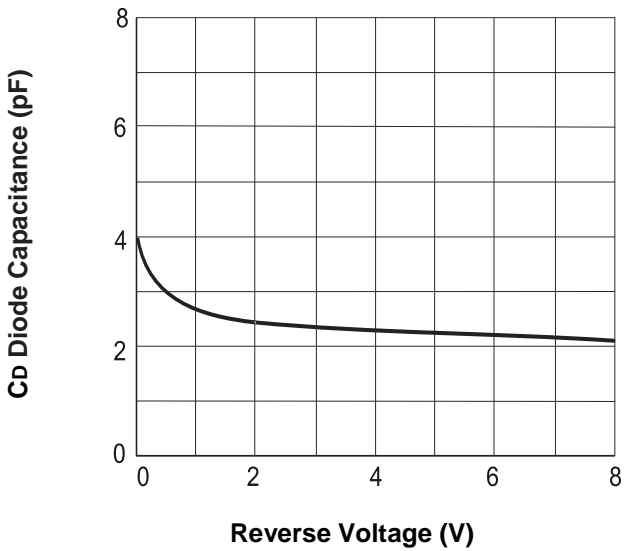


Fig.4- Typical Reverse Characteristics

