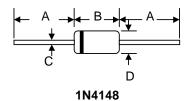


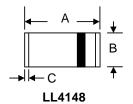
# 1N4148 / LL4148

## **FAST SWITCHING DIODE**

### **Features**

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





## **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

DO-35		
Dim	Min	Max
Α	25.40	_
В	_	4.00
С	_	0.60
D	_	2.00
All Dimensions in mm		

MiniMELF			
Dim	MIn	Max	
Α	3.30	3.70	
В	1.30	1.60	
С	0.28	0.50	
All Dimensions in mm			

## $\begin{tabular}{ll} \textbf{Maximum Ratings} @ T_A = 25^{\circ} C \ unless \ otherwise \ specified \\ \end{tabular}$

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	VRM	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	75	V
RMS Reverse Voltage	VR(RMS)	53	V
Forward Continuous Current (Note 1)	lғм	300	mA
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \ge 50 \text{MHz}$ (Note 1)	n lo	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1. @ t = 1.	I IFSM	1.0 2.0	А
Power Dissipation (Note 1) Derate Above 25°C	Pd	500 1.68	mW mW/°C
Thermal Resistance, Junction to Ambient Air (Note 1)	R $\theta$ JA	300	K/W
Operating and Storage Temperature Range	Ті, Тѕтс	-65 to +175	°C

## $\textbf{Electrical Characteristics} \ @T_{\text{A}}\text{=}25^{\circ}\text{C unless otherwise specified}$

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	VFM	_	1.0	V	I <sub>F</sub> = 10mA
Maximum Peak Reverse Current	Irm	_	5.0 50 30 25	μΑ μΑ μΑ nA	$V_R = 75V$ $V_R = 70V, T_j = 150^{\circ}C$ $V_R = 20V, T_j = 150^{\circ}C$ $V_R = 20V$
Capacitance	Cj	_	4.0	pF	V <sub>R</sub> = 0, f = 1.0MHz
Reverse Recovery Time	trr	_	4.0	ns	$I_F$ = 10mA to $I_R$ = 1.0mA $V_R$ = 6.0V, $R_L$ = 100 $\Omega$

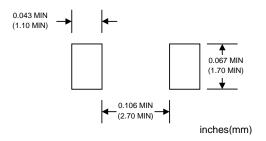
Note: 1. Diode on Ceramic Substrate 10mm x 8mm x 0.7mm.

#### **ORDERING INFORMATION**

Product No.◆	Package Type	Shipping Quantity
1N4148-T3	DO-35	10000/Tape & Reel
1N4148-TB	DO-35	5000/Tape & Box
1N4148	DO-35	1000 Units/Box
LL4148-T1	MiniMELF	2500/Tape & Reel
LL4148-T3	MiniMELF	10000/Tape & Reel

Products listed in **bold** are WTE **Preferred** devices.

#### RECOMMENDED FOOTPRINT (MiniMELF)



Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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We power your everyday.

<sup>◆</sup>T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.