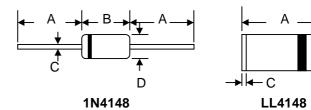


# 1N4148 / LL4148

# **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			

## Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

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)	Іғм	300	mA
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \ge 50 \text{MHz}$ (Note 1)	lo	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s @ t = 1.0µs	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)	RθJA	300	K/W
Operating and Storage Temperature Range	Tj, Tstg	-65 to +175	°C

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

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	$V_R = 75V$ $V_R = 70V$ , $T_j = 150$ °C $V_R = 20V$ , $T_j = 150$ °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 $\Omega$

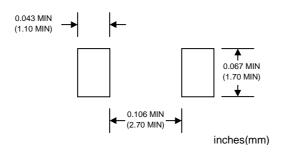
Note: 1. Diode on Ceramic Substrate 10mm x 8mm x 0.7mm.

#### **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)



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**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.

This datasheet has been download from:

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Datasheets for electronics components.