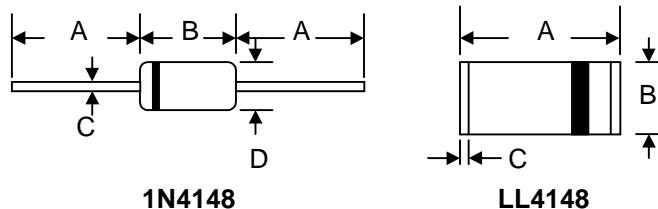


# 1N4148 / LL4148

## 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
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<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	75	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	53	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	300	mA
Rectified Current (Average), Half Wave Rectification with Resistive Load and f ≥ 50MHz (Note 1)	I <sub>O</sub>	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s @ t = 1.0μs	I <sub>FSM</sub>	1.0 2.0	A
Power Dissipation (Note 1) Derate Above 25°C	P <sub>d</sub>	500 1.68	mW mW/°C
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	300	K/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175	°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 50 30 25	$\mu\text{A}$ $\mu\text{A}$ $\mu\text{A}$ $\text{nA}$	$V_R = 75\text{V}$ $V_R = 70\text{V}, T_j = 150^{\circ}\text{C}$ $V_R = 20\text{V}, T_j = 150^{\circ}\text{C}$ $V_R = 20\text{V}$
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.

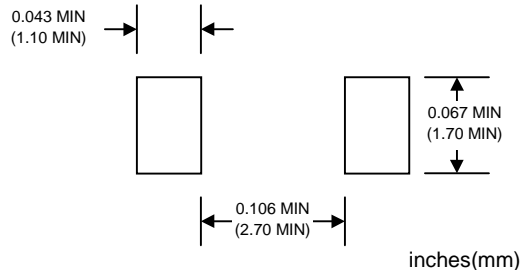
## ORDERING INFORMATION

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

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

♦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.

## 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.

### Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

*We power your everyday.*