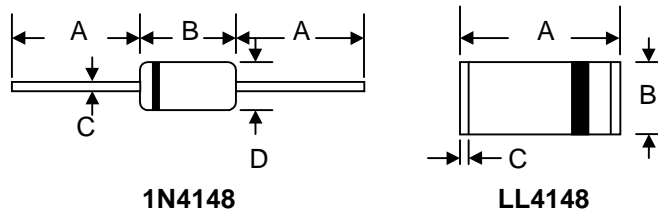


1N4148 / LL4148

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_A=25°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 ≥ 50MHz (Note 1)	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s @ t = 1.0μs	I _{FSM}	1.0 2.0	A
Power Dissipation (Note 1) Derate Above 25°C	P _d	500 1.68	mW mW/°C
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	300	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175	°C

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

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	μA μA μA 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.

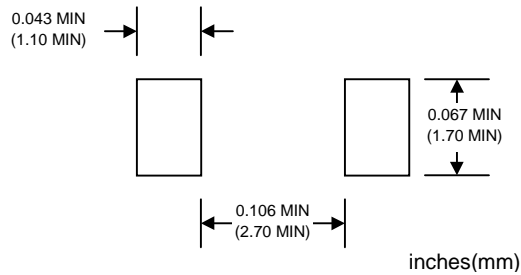
ORDERING INFORMATION

Product No.♦	Package Type	Shipping Quantity
1N4148-T3	DO-35	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.

♦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)



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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.

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>

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