



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: DO-35, Mini MELF/DL-35
- Terminals: Plated leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Weight: DO-35 0.13 grams
Mini MELF/DL-35 0.05 grams
- Marking: Cathode band

Maximum Ratings@T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _R V _{RRM} V _{RWM}	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	°C/W
Junction and Storage Temperature Range	T _J , T _{STG}	-65 to +175	°C

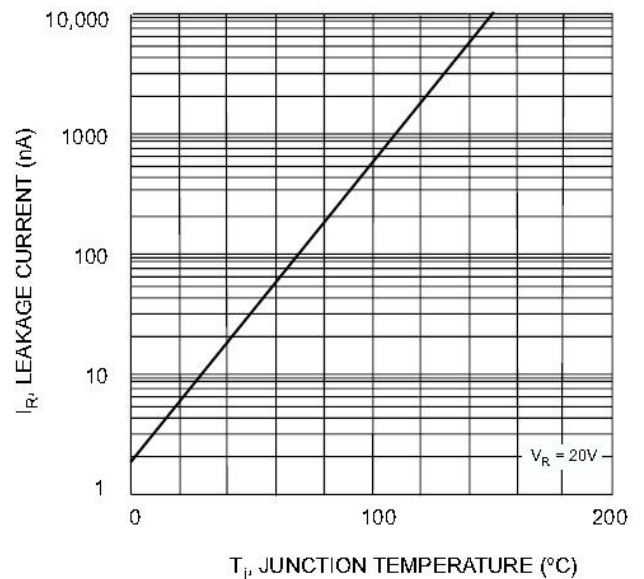
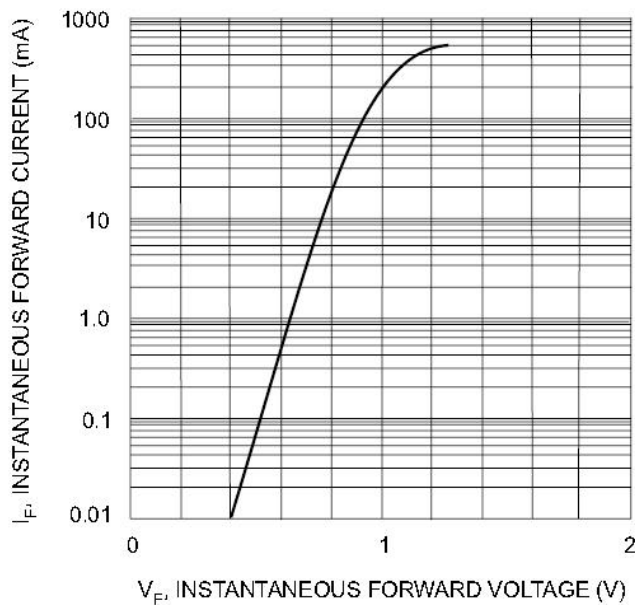
Note: 1. Diode on Ceramic substrate 10×8×0.7mm

Electrical Characteristics @T_A=25°C unless otherwise specified

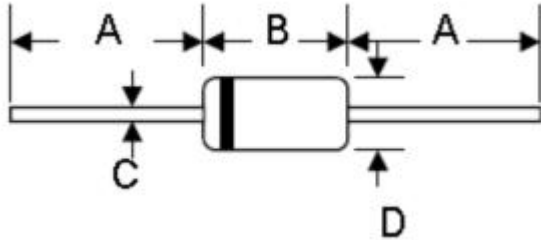
Characteristic	Symbol	Min	Max	Units	Test Condition
Forward Voltage*	V _{FM}	-	1.0	V	@I _F =10mA
Peak Reverse Current*	I _{RM}	-	5.0 50 30 25	μA μA μA nA	@V _R =75V @V _R =70V, T _J =150°C @V _R =20V, T _J =150°C @V _R =20V
Capacitance	C _j	-	4.0	pF	V _R =0V, f=1.0MHz
Reverse Recovery Time	t _{rr}	-	4.0	ns	I _F =10mA to I _R =1.0mA V _R =6.0V, R _L =100Ω

* Pulse width < 300 μs, duty cycle < 2%

Ratings and Characteristics Curves

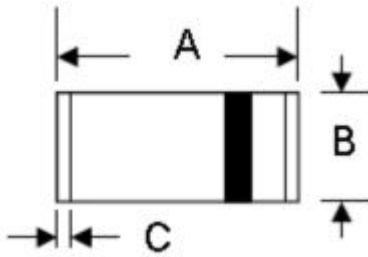


Mechanical Dimensions DO-35(1N4148)



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.40	-	1.000	-
B	-	4.00	-	0.157
C	-	0.60	-	0.024
D	-	2.00	-	0.079

Mechanical Dimensions Mini MELF/DL-35 (LL4148)



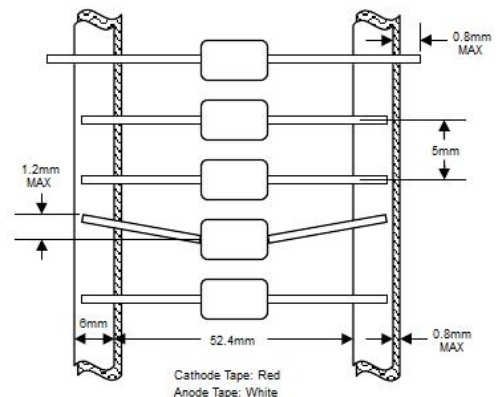
SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.70	0.130	0.146
B	1.30	1.60	0.051	0.063
C	0.28	0.50	0.011	0.020

Ordering Information

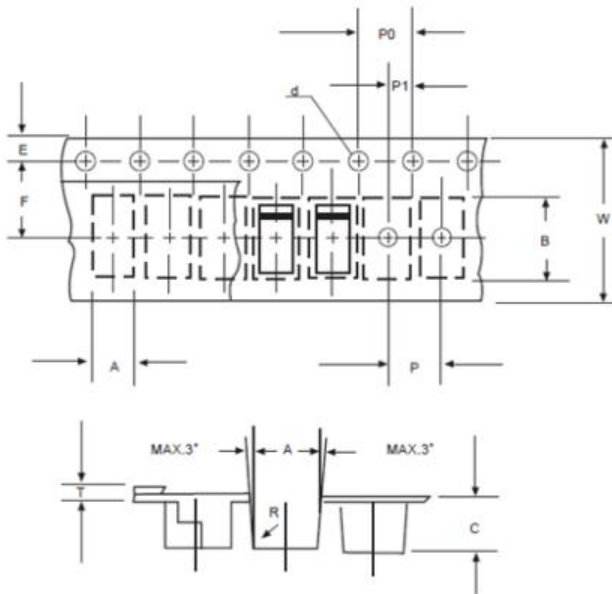
Device	Package	Shipping
1N4148	DO-35 (Pb-Free)	5000pcs /tape
LL4148	Mini MELF/DL-35 (Pb-Free)	2500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Carrier Tape Specification DO-35



Carrier Tape Specification Mini MELF/DL-35



SYMBOL	Millimeters	
	Min.	Max.
A	1.50	1.70
B	3.60	3.80
C	1.55	1.75
d	1.40	1.60
E	1.65	1.85
F	5.45	5.55
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
T	0.17	0.27
W	7.90	8.10

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