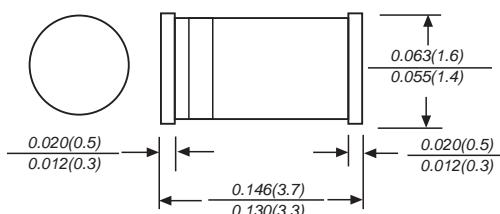


## MINI MELF SWITCHING DIODES

Reverse Voltage - 100 Volts Forward Current - 0.15 Ampere

MINI MELF

Dimensions in inches and (millimeters)

FEATURES

- Fast Switching Device (TRR <4.0 nS)
- Power Dissipation of 500mW
- High Stability and High Reliability
- Low reverse leakage

MECHANICAL DATA

Case: MINI MELF Glass Case

Polarity: Color band denotes cathode end

Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**Maximum Ratings & Thermal Characteristics** (Ratings at 25 °C ambient temperature unless otherwise specified.)

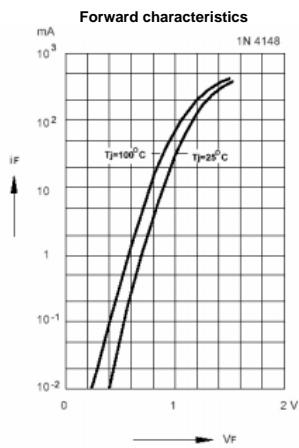
Parameters	Symbol	Value	Unit
Reverse Voltage	V <sub>R</sub>	75	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
Power Dissipation	P <sub>d</sub>	500	mW
Operating junction temperature	T <sub>j</sub>	175	
Storage temperature range	T <sub>s</sub>	-65-+200	
Working Inverse Voltage	W <sub>IV</sub>	75	V
Average Rectified Current	I <sub>o</sub>	150	mA
Non-repetitive Peak Forward Current	I <sub>FM</sub>	450	mA
Peak Forward Surge Current @tp=1s; TA=25	I <sub>FSM</sub>	2.0	A

Valid provided that electrodes are kept at ambient temperature.

**Electrical Characteristics** (Ratings at 25 °C ambient temperature unless otherwise specified).

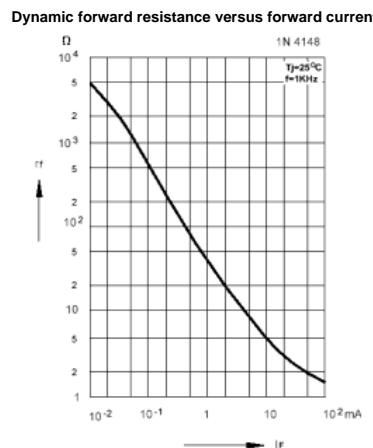
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
B <sub>V</sub>	Breakdown Voltage	I <sub>R</sub> =100uA I <sub>R</sub> =5uA	100 75		V
I <sub>R</sub>	Reverse Leakage Current	VR=20V VR=75	---	25 5	nA uA
V <sub>F</sub>	Forward Voltage LL4448 LL4148 LL4448	I <sub>F</sub> =5mA I <sub>F</sub> =10mA I <sub>F</sub> =100mA	0.62 --- ---	0.72 1 1	V
T <sub>RR</sub>	Reverse Recovery Time	I <sub>F</sub> = 10mA, I <sub>R</sub> =1.0mA RL=100Ω IRR=1mA	---	4	nS
C	Capacitance	VR=0V, f=1MHZ	---	4	pF

RATINGS AND CHARACTERISTIC CURVES LL4148

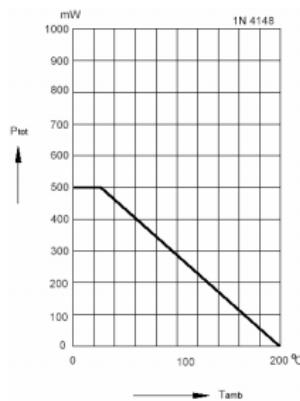


### Admissible power dissipation versus ambient temperature

Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature



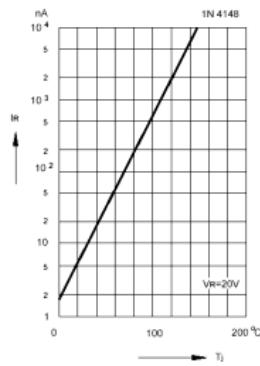
### Relative capacitance versus reverse voltage



### Leakage current versus junction temperature



Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature



A are kept at ambient temperature

IFRM

$\gamma = 0$

$\gamma = 0.1$

$\gamma = 0.2$

$\gamma = 0.5$

$I = I_0 e^{\gamma t/T}$

$T = t_p$

$I = I_0$

1N 4148