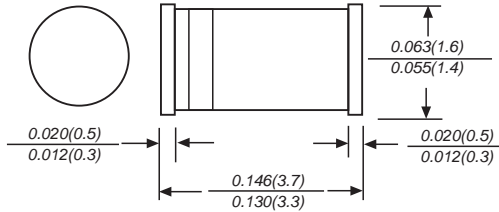


# LL4148/LL4448

## SWITCHING DIODE

### 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 ambient temperature unless otherwise specified.)

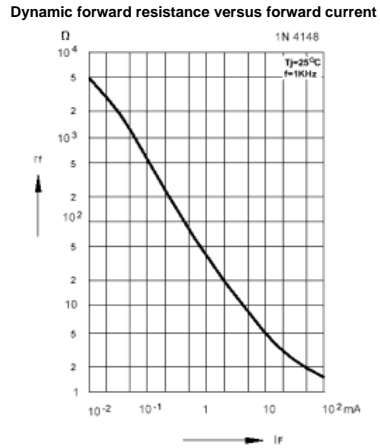
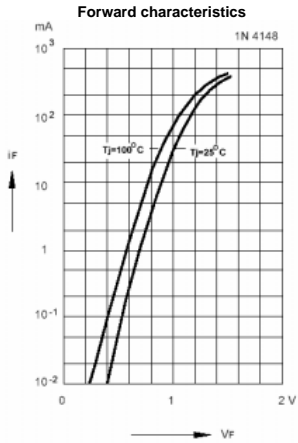
Parameters	Symbol	Value	Unit
Reverse Voltage	$V_R$	75	V
Peak Reverse Voltage	$V_{RM}$	100	V
Power Dissipation	$P_d$	500	mW
Operating junction temperature	$T_j$	175	
Storage temperature range	$T_s$	-65-+200	
Working Inverse Voltage	$W_{IV}$	75	V
Average Rectified Current	$I_o$	150	mA
Non-repetitive Peak Forward Current	$I_{FM}$	450	mA
Peak Forward Surge Current @ $t_p=1s$ ; $T_A=25$	$I_{FSM}$	2.0	A

Valid provided that electrodes are kept at ambient temperature.

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

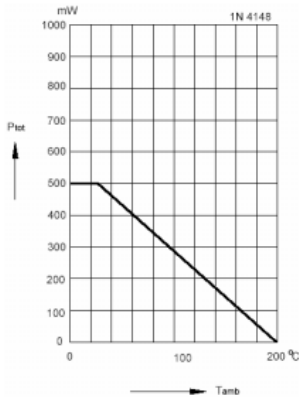
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
<b>BV</b>	Breakdown Voltage	$I_R=100\mu A$ $I_R=5\mu A$	100 75		V
<b>IR</b>	Reverse Leakage Current	$V_R=20V$ $V_R=75$	--- ---	25 5	nA uA
<b>VF</b>	Forward Voltage	LL4448 LL4148 LL4448	$I_F=5mA$ $I_F=10mA$ $I_F=100mA$	0.62 --- 1 1	V
<b>TRR</b>	Reverse Recovery Time	$I_F=10mA$ , $I_R=1.0mA$ $R_L=100\Omega$ $I_{RR}=1mA$	---	4	nS
<b>C</b>	Capacitance	$V_R=0V$ , $f=1MHz$	---	4	pF

# RATINGS AND CHARACTERISTIC CURVES LL4148/LL4448

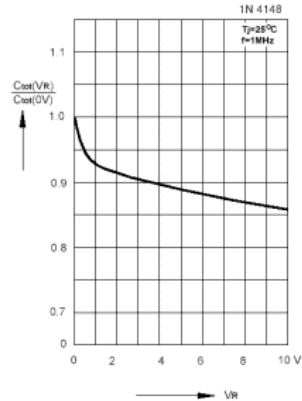


**Admissible power dissipation versus ambient temperature**

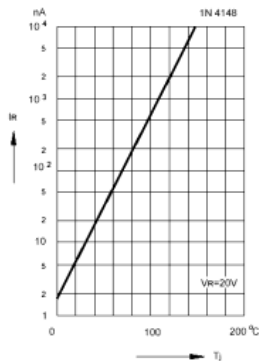
Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature



**Relative capacitance versus reverse voltage**



**Leakage current versus junction temperature**



**Admissible repetitive peak forward current versus pulse duration**

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

