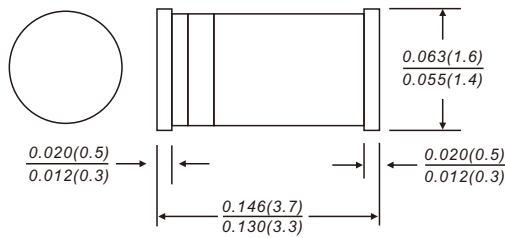




LL4148/LL4448

SWITCHING DIODE

MINI MELF



Dimensions in inches and (millimeters)

FEATURES

- Fast Switching Device (TRR <math>< 4.0 \text{ nS}</math>)
- Power Dissipation of 500mW
- High Stability and High Reliability
- Low reverse leakage

MECHANICAL DATA

Case: MINIMELF 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_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Power Dissipation	P_d	500	mW
Operating junction temperature	T_j	175	°C
Storage temperature range	T_s	-65-+200	°C
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 @ $t_p=1s$; $T_A=25^\circ\text{C}$	I_{FSM}	2.0	A

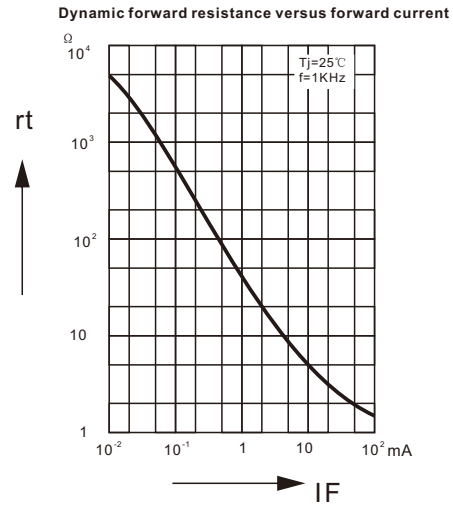
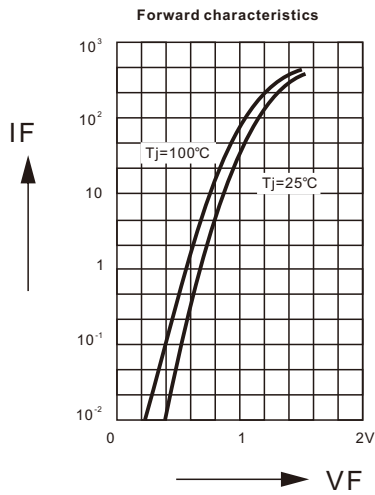
Valid provided that electrodes are kept at ambient temperature.

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

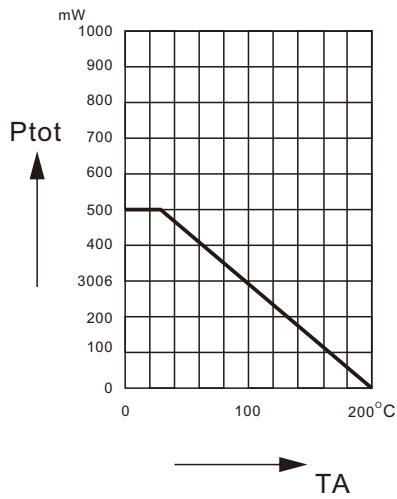
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
BV	Breakdown Voltage	$I_R=100\mu\text{A}$ $I_R=5\mu\text{A}$	100 75		V
IR	Reverse Leakage Current	$V_R=20\text{V}$ $V_R=75$	--- ---	25 5	nA μA
VF	Forward Voltage LL4448 LL4148 LL4448	$I_F=10\text{mA}$ $I_F=5\text{mA}$ $I_F=100\text{mA}$	0.62 --- ---	0.72 1 1	V
TRR	Reverse Recovery Time	$I_F=10\text{mA}$, $I_R=1.0\text{mA}$ $R_L=100\Omega$ $I_{RR}=1\text{mA}$	---	4	nS
C	Capacitance	$V_R=0\text{V}$, $f=1\text{MHZ}$	---	4	pF



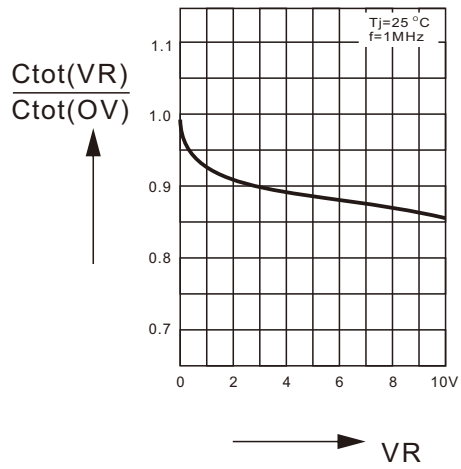
RATINGS AND CHARACTERISTIC CURVES LL4148/LL4448



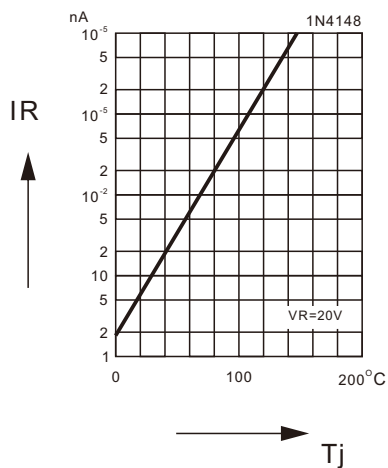
Admissible power dissipation versus ambient temperature
Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature



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

