

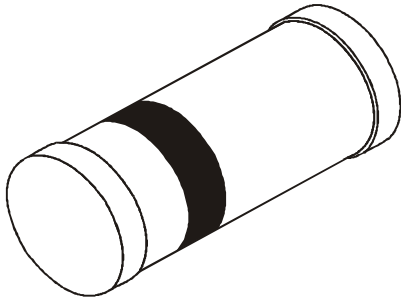
HIGH SPEED SILICON SWITCHING DIODES

LL4148

LL4448

SOD - 80C

Mini MELF (LL- 34)



Polarity: Cathode is indicated by a black band

Hermetically Sealed, Glass Silicon Diodes

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Reverse Voltage (Continuous)	V_R	75	V
Average Rectified Forward Current	$I_F (av)$	150	mA
Forward Current (DC)	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	450	mA
Non Repetitive Peak Surge Current $t=1 \text{ ms}$	I_{FSM}	2000	mA
$t=1 \text{ s}$	I_{FSM}	500	mA
Power Dissipation up to $T_{amb}=25^\circ \text{C}$	P_{tot}	500	mW
Derating factor		2.85	mW/K
Operating & Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +200	$^\circ \text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ \text{C}$ Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT	
Forward Voltage	V_F	$I_F=10\text{mA}$ LL4148	0.62	1.0	V	
		$I_F=5\text{mA}$ LL4448		0.72		
		$I_F=100\text{mA}$ LL4448		1.0		
Reverse Current	I_R	$V_R=20\text{V}$		25	nA	
		$V_R=75\text{V}$		5.0		μA
		$V_R=20\text{V}, T_j=100^\circ \text{C},$ LL4448		3.0		μA
		$V_R=20\text{V}, T_j=150^\circ \text{C}$		50		μA
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu\text{A}$	100		V	

DYNAMIC CHARACTERISTICS

Diode Capacitance	C_d	$V_R=0\text{V}, f=1\text{MHz}$		4.0	pF
Forward Recovery Voltage	V_{fr}	$I_F=50\text{mA}, t_f=20\text{ns}$		2.5	V
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA},$ to $I_R=60\text{mA}$ $R_L=100 \Omega$ Measured @ $I_R=1\text{mA}$		4.0	ns

