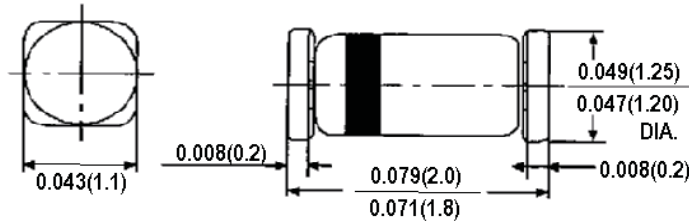


MCL4148 Micro MELF SWITCHING Diode

MICRO MELF (Molded Glass)

Unit: inch (mm)



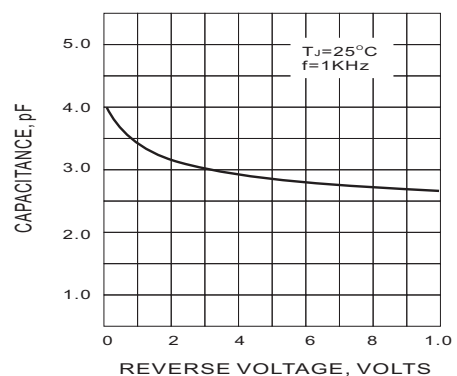
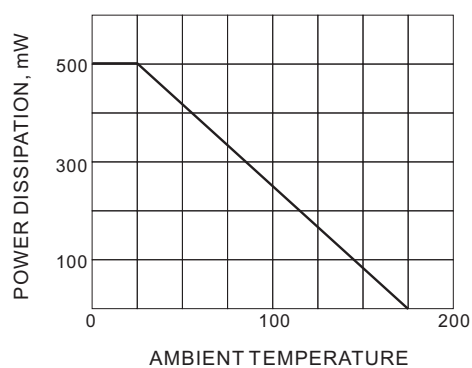
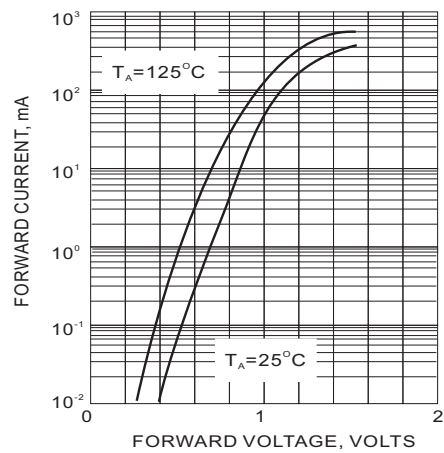
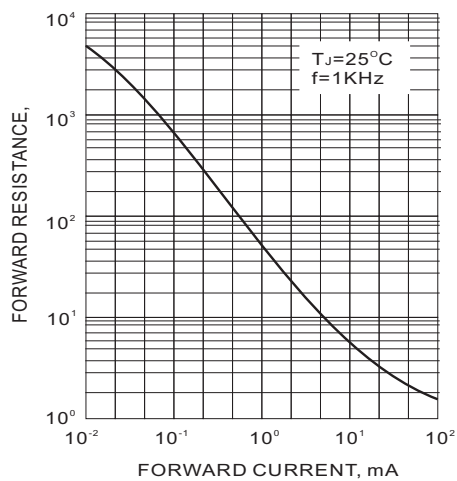
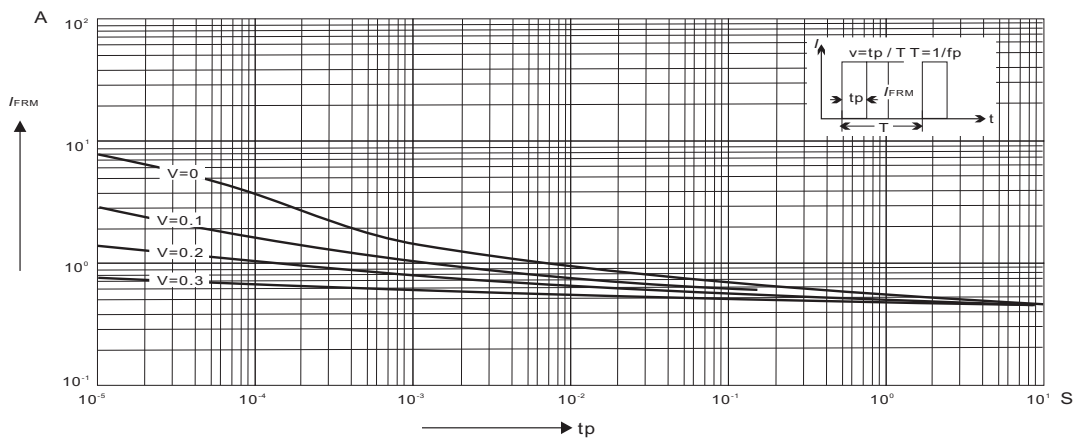
Absolute Maximum Ratings

	Symbol	Value	UNIT
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectifier Current (Average) Half Wave Rectification w/Resist Load at $T_{amb}=25\text{degC}$ and $F>1/50\text{Hz}$	I_O	150	mA
Surge Forward Current @ $t<1\text{s}$ and $T_j=25\text{degC}$	I_{FSM}	500	mA
Power Dissipation at $T_{amb}=25\text{degC}$	P_{tot}	500	mW
Junction Temperature	T_j	175	$^{\circ}\text{C}$
Storage Temperature Range	T_s	-65 to +175	$^{\circ}\text{C}$

Characteristics at $T_j=25^{\circ}\text{C}$

	Symbol	Min	Max	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	-	1	V
Leakage Current at $V_R = 20\text{V}$	I_R	-	25	nA
at $V_R = 75\text{V}$	I_R	-	5	uA
at $V_R = 20\text{V}$, $T_j = 150^{\circ}\text{C}$	I_R	-	50	uA
Reverse Breakdown Voltage tested with 100uS Pulses	$V_{(BR)R}$	100	-	V
Capacitance at $V_F=V_R=0$	C_{tot}	-	4	pF
Voltage Rise when Switching On Tested with 50mA Forward Pulses $T_p=0.1\mu\text{s}$, Rise Time $<30\text{ns}$, $f_p=5\sim100\text{kHz}$	V_{fr}	-	2.5	V
Reverse Recovery Time From $I_F=-I_R=10\text{mA}$ to $I_{RR}=-1\text{mA}$ $V_R=6\text{V}$ $R_L=100\text{ ohms}$	t_{rr}	-	4	ns
Thermal Resistance Function to Ambient Air	R_{thA}	-	0.35	K/mW
Rectification Efficiency at $f=100\text{MHz}$, $V_{RF}=2\text{V}$	η_v	0.45	-	-

RATING AND CHARACTERISTICS CURVES (MCL4148)



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MICRO-MELF	-T	3,000	30,000	180*125*185	390*270*400	240,000	

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