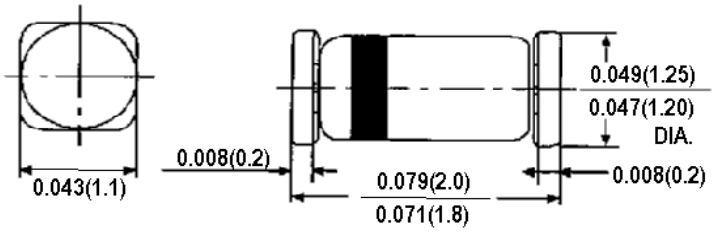
RECTRON
RECTIFIER SPECIALISTS

MCL4148

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 Tamb=25degC and F>/ 50Hz	I_O	150	mA
Surge Forward Current @ t<1s and Tj=25degC	I_{FSM}	500	mA
Power Dissipation at Tamb= 25degC	P_{tot}	500	mW
Junction Temperature	T_j	175	^oC
Storage Temperature Range	T_S	-65 to +175	^oC

Characteristics at Tj=25 ^oC

	Symbol	Min	Max	Unit
Forward Voltage at I_F = 10 mA	V_F	-	1	V
Leakage Current				
at V_R = 20V	I_R	-	25	nA
at V_R = 75V	I_R	-	5	uA
at V_R = 20V, Tj = 150 ^oC	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 Tp=0.1us,RiseTime<30ns,fp=5~100kHz	V_{fr}	-	2.5	V
Reverse Recovery Time From IF=-IR=10mA to IRR=-1mA VR=6V RL=100 ohms	trr	-	4	ns
Thermal Resistance Function to Ambient Air	R_{thA}	-	0.35	K/mW
Rectification Efficiency at f=100MHZ, V_{RF}= 2V	nv	0.45	-	-