

**MM4148**

**SMALL SIGNAL DIODE**

**VOLTAGE: 100V**

**CURRENT: 150mA**



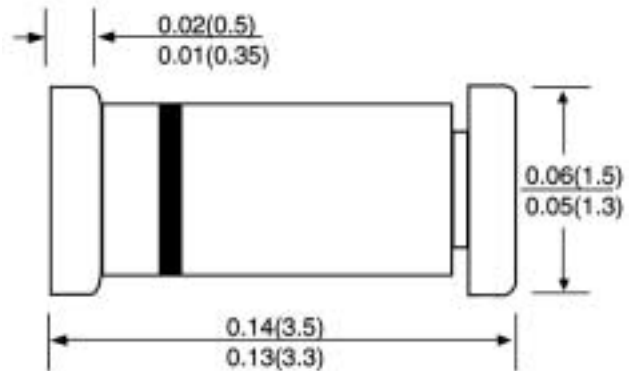
**FEATURE**

Silicon Single Junction Diode  
Fast switching Diode

**MECHANICAL DATA**

Case: MINI-MELF Glass case  
Polarity: color band denotes cathode  
Mounting position: any  
Weight: approx . 0.06g

**MINI-MELF**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Parameter	Symbol	Limit	Units
Recurrent Peak Reverse Voltage	V <sub>rm</sub>	100	V
Recurrent Voltage	V <sub>r</sub>	75	V
Average Forward Rectified Current Half-Wave Rectification With Resistive Load at T <sub>amp</sub> =25°C	I <sub>f(av)</sub>	150	mA
Peak Forward Surge Current T<1.0ms and T <sub>j</sub> =25°C	I <sub>fsm</sub>	500	mA
Power dissipation at t <sub>amp</sub> =25°C	P <sub>tot</sub>	500	mW
Typical Thermal Resistance (Note 1)	R(ja)	350	°C /W
Junction Temperature	T <sub>j</sub>	175	°C
Storage Temperature	T <sub>S</sub>	-65 ~ +175	°C

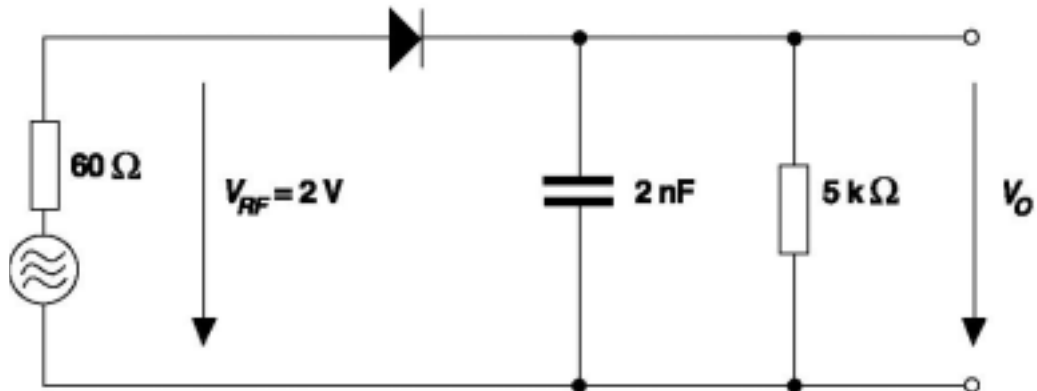
**Note:**

- 1. Valid provide that leads at a distance of 8mm from case are kept at ambient temperature

Electrical Characteristics(TJ = 25 unless otherwise noted)

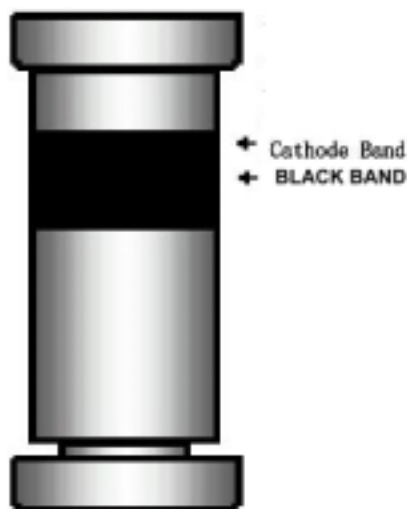
parameter	symbol	Test Condition	min	typ	max	unit
Reverse Breakdown Voltage	Vbr	Ir=100uA	100			V
Forward Voltage	Vf	If=10mA			1.0V	V
Leakage Current	Ir	Vr=20V			25	nA
		Vr=75V			5.0	uA
		Vr=20V, Tj=150			50	uA
Capacitance	Ctot	Vf=Vr=0V			4	pF
Voltage Rise when Switching ON (tested with 50mA Pulses)	Vfr	Tp=0.1uS, Rise Time<30nS Fp=5 to100KHZ			2.5	nS
Reverse Recovery Time	Trr	If=10mA, Ir=1 mA Vr=6v, Rl=100			4	nS

**Rectification Efficiency Measurement Circuit**



**Marking:**

1



# RATINGS AND CHARACTERISTIC CURVES MM4148

2

