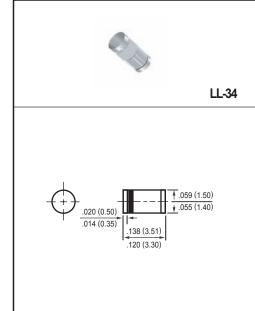


# MM4148

# SURFACE MOUNT LL-34 (SOD-8OC) SWITCHING DIODE

#### FEATURES

- \* Fast Switching Device(T<sub>RR</sub><4.0nS)
- \* LL-34 Glass Case
- \* Through-Hole Device Type Mounting
- \* Hermetically Sealed Glass
- \* Compression Bonded Construction
- \* All external surfaces are corrosion resistant and leads are readily solderable



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

### Absolute Maximum Ratings (Ta=25 °C)

	Symbol	Value	UNIT	
Reverse Voltage	V <sub>R</sub>	75	V	
Reverse Recovery Time				
I <sub>F</sub> =-I <sub>R</sub> =10mA to I <sub>RR</sub> =-1mA	trr	4	ns	
V <sub>R</sub> =6V R <sub>L</sub> =100 ohms				
Power Dissipatipn at Tamb= 25°C	P <sub>tot</sub>	500	mW	
3.33mW/ºC	' tot		11100	
Forward Current	١ <sub>F</sub>	300	mA	
Junction Temperature	т <sub>ј</sub>	175	°C	
Storage Temperature Range	Τ <sub>S</sub>	-65 to +175	°C	

## Electrical Characteristics (Ta=25 °C)

	Symbol	Min	Max	Unit
Minimum Breakdown Voltage @I <sub>R</sub> = 100uA	BV	100	-	V
Rectifier Current (Average)				
Half Wave Rectification w/Resist Load	Ι <sub>ο</sub>	-	150	mA
at Ta= 25 ℃ and f > or = 50Hz				
Peak Forward Surge Current PW<1 sec	I <sub>Fsurge</sub>	-	500	mA
Maximum Forward Voltage IF = 10 mA	V <sub>F</sub>	-	1.0	V
Maximum reverse Leakage Current at V <sub>R</sub> = 20V		-	0.025	
at $V_R = 75V$ at $V_R = 20V$ , Tj = 150°C	۱ <sub>R</sub>	-	5.0 50	uA
Maximum Junction Capacitance $V_F = V_R = 0, f= 1 MHz$	Cj	-	4	pF
Reverse Recovery Time From				
$I_F = -I_R = 10mA$ to $I_{RR} = -1mA$	trr	-	4	ns
$V_R = 6V R_L = 100 \text{ ohms}$				
Maximum Thermal Resistance Junction to Ambient Air	R <sub>thJA</sub>	-	0.35	∘C/mW
Rectification Efficiency at f=100MHZ, V <sub>rf</sub> = 2V	nv	0.45	-	-

Note : "Fully ROHS compliant", "100% Sn plating (Pb-free)".

VB 2007-2

**C**RECTRON —

# **DISCLAIMER NOTICE**

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.

