

# **MMSD4148**



SOD123 Color Band Denotes Cathode Top Marking: 5H

## **Small Signal Diode**

## Absolute Maximum Ratings\* T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	100	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	200	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 2.0	A A
T <sub>stg</sub>	Storage Temperature Range -55		°C
TJ	Operating Junction Temperature	150	°C

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### **Thermal Characteristics**

Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	400	mW
$R_{ ext{ heta}JA}$	Thermal Resistance, Junction to Ambient	312	°C/W

### Electrical Characteristics T<sub>A</sub>=25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
$V_R$	Breakdown Voltage	I <sub>R</sub> = 5.0 μA I <sub>R</sub> = 100 μA	75 100		V V
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 10 mA		1.0	V
I <sub>R</sub>	Reverse Current	V <sub>R</sub> = 20 V V <sub>R</sub> = 20 V, T <sub>A</sub> = 150°C V <sub>R</sub> = 75 V		25 50 5.0	nA μA μA
C <sub>T</sub>	Total Capacitance	$V_{R} = 0, f = 1.0 \text{ MHz}$		4.0	pF
t <sub>rr</sub>	Reverse Recovery Time	$I_F = 10$ mA, $V_R = 6.0$ V $I_{RR} = 1.0$ mA, $R_L = 100$ Ω		4.0	ns

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