

MMSD4148



SOD123 Color Band Denotes Cathode Top Marking: 5H

Small Signal Diode

Absolute Maximum Ratings* $T_A = 25 \, ^{\circ}\!C$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	100	V
I _{F(AV)}	Average Rectified Forward Current	200	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 2.0	A A
T _{stg}	Storage Temperature Range	-55 to +150	°C
T _J	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_{D}	Power Dissipation	400	mW	
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	312	°C/W	

Electrical Characteristics T_A = 25 °C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
V_R	Breakdown Voltage	$I_R = 5.0 \mu A$ $I_R = 100 \mu A$	75 100		V V
V _F	Forward Voltage	I _F = 10 mA		1.0	V
I _R	Reverse Current	V _R = 20 V V _R = 20 V, T _A = 150°C V _R = 75 V		25 50 5.0	nA μA μA
C _T	Total Capacitance	V _R = 0, f = 1.0 MHz		4.0	pF
t _{rr}	Reverse Recovery Time	$I_F = 10 \text{mA}, V_R = 6.0 \text{ V}$ $I_{RR} = 1.0 \text{ mA}, R_L = 100 \Omega$		4.0	ns

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