

MMSD4148



SOD123 Color Band Denotes Cathode Top Marking: 5H

Small Signal Diode

Absolute Maximum Ratings* T_A = 25°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		°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 _D	Power Dissipation	400	mW
$R_{ ext{ heta}JA}$	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 μA I _R = 100 μA	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	$V_{R} = 0, f = 1.0 \text{ MHz}$		4.0	pF
t _{rr}	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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