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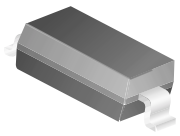
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FAIRCHILD SEMICONDUCTOR®

June 2005

MMSD4448
Small Signal Diode



SOD123
Color Band Denotes Cathode
Top Marking: 10

Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
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 the diode may be impaired.

Thermal Characteristics

Symbol	Parameter	Value	Unit
P_D	Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	312	°C/W

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V_R	Breakdown Voltage	I_R = 5.0µA I_R = 100µA	75 100		V
V_F	Forward Voltage	I_F = 5mA I_F = 100mA	0.62	0.72 1.0	V V
I_R	Reverse Leakage	V_R = 20V V_R = 20V, T_A = 150°C V_R = 75V		25 50 5.0	nA µA µA
C_T	Total Capacitance	V_R = 0, f = 1.0MHz		2.0	pF
t_{rr}	Reverse Recovery Time	I_F = 10mA, V_R = 6.0V, I_{rr} = 1.0mA, R_L = 100Ω		4.0	ns
$V_{F(peak)}$	Peak Forward Recovery Voltage	I_F = 50mA, pw = 0.1µs rep rate: 5 to 10KHz		2.5	V

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Rev. I15

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