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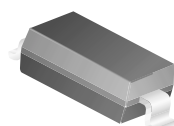
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June 2005

MMSD4448

Small Signal Diode



SOD123
 Color Band Denotes Cathode
 Top Marking: 10

Absolute Maximum Ratings * $T_a = 25^\circ\text{C}$ 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	A
		2.0	A
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	150	$^\circ\text{C}$

* 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	$^\circ\text{C}/\text{W}$

Electrical Characteristics $T_C = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V_R	Breakdown Voltage	$I_R = 5.0\mu\text{A}$	75		V
		$I_R = 100\mu\text{A}$	100		
V_F	Forward Voltage	$I_F = 5\text{mA}$	0.62	0.72	V
		$I_F = 100\text{mA}$		1.0	V
I_R	Reverse Leakage	$V_R = 20\text{V}$		25	nA
		$V_R = 20\text{V}, T_A = 150^\circ\text{C}$		50	μA
		$V_R = 75\text{V}$		5.0	μA
C_T	Total Capacitance	$V_R = 0, f = 1.0\text{MHz}$		2.0	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
$V_{F(\text{peak})}$	Peak Forward Recovery Voltage	$I_F = 50\text{mA}, pw = 0.1\mu\text{s}$ rep rate: 5 to 10KHz		2.5	V

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Programmable Active Droop™		PACMAN™	SMART START™	VCX™

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