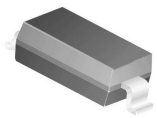
OM SENI

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

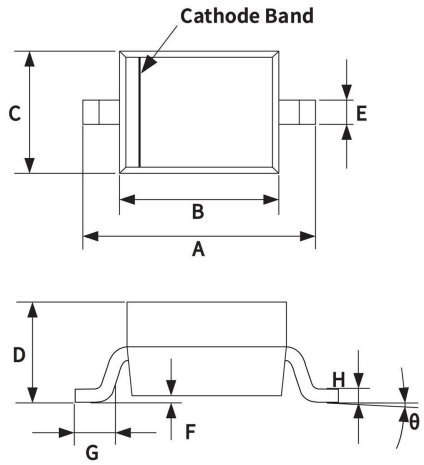
Symbol	Parameter	Conditions	Min.	Max.	Units
V_R	Breakdown Voltage	I_R = 5.0μA I_R = 100μA	75 100		V
V_F	Forward Voltage	I_F = 5mA I_F = 100mA	0.62	0.72 1.0	V V
I_R	Reverse Leakage	V_R = 20V V_R = 20V, T_A = 150°C V_R = 75V		25 50 5.0	nA μA μA
C_T	Total Capacitance	V_R = 0, f = 1.0MHz		2.0	pF
t_{rr}	Reverse 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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Ordering Information

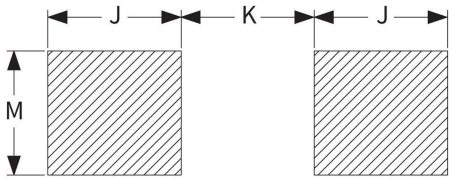
PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-123	R1	0.012	3000	30000	240000	7''

Package Outline Dimensions (SOD-123)



Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.55	3.85	0.140	0.152
B	2.55	2.85	0.100	0.112
C	1.40	1.80	0.055	0.071
D	0.95	1.35	0.140	0.152
E	0.51	0.71	0.037	0.053
F	-	0.15	-	0.006
G	0.15	0.45	0.006	0.008
H	0.08	0.25	0.003	0.010
θ	-	8°	-	8°

Suggested Pad Layout



Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
J	0.91	-	0.036	-
K	-	2.36	-	0.092
M	1.22	-	0.048	-