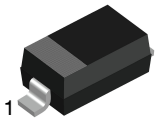
Small Signal Diode

MMSD4448



Color Band Denotes Cathode

SOD-123 2-LEAD
CASE 425

ABSOLUTE MAXIMUM RATINGS (T_A = 25 °C unless otherwise noted)

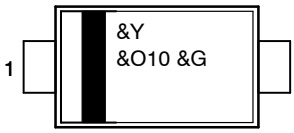
Symbol	Parameter		Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage		100	V
$I_{F(AV)}$	Average Rectified Forward Current		200	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current	Pulse Width = 1.0 s	1.0	A
		Pulse Width = 1.0 μs	2.0	
T_{STG}	Storage Temperature Range		−55 to +150	°C
T_J	Operating Junction Temperature		150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

THERMAL CHARACTERISTICS

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

MARKING DIAGRAM



&Y = Binary Calendar Year Coding Scheme
&O10 = Specific Device Code
&G = Single Digit Weekly Date Code

ORDERING INFORMATION

Device	Package	Shipping†
MMSD4448	SOD-123 2-LEAD	3000 / Tape & Reel

† For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

ELECTRICAL CHARACTERISTICS (T_C = 25 °C unless otherwise noted)

Symbol	Characteristic	Conditions	Min	Typ	Max	Unit
V_R	Breakdown Voltage	I_R = 5.0 μA	75	–	–	V
		I_R = 100 μA	100	–	–	
V_F	Forward Voltage	I_F = 5 mA	0.62	–	0.72	V
		I_F = 100 mA	–	–	1.0	
I_R	Reverse Leakage	V_R = 20 V	–	–	25	nA
		V_R = 20 V, T_A = 150 °C	–	–	50	μA
		V_R = 75 V	–	–	5.0	μA
C_T	Total Capacitance	V_R = 0, f = 1.0 MHz	–	–	2.0	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
$V_{F(peak)}$	Peak Forward Recovery Voltage	I_F = 50 mA, pw = 0.1 μs rep rate: 5 to 10 kHz	–	–	2.5	V

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

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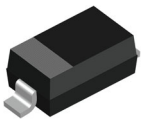
REVISION HISTORY

Revision	Description of Changes	Date
1	Data Sheet converted to **onsemi** format.	6/10/2026

This document has undergone updates prior to the inclusion of this revision history table. The changes tracked here only reflect updates made on the noted approval dates.

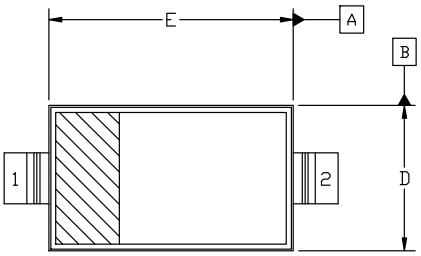
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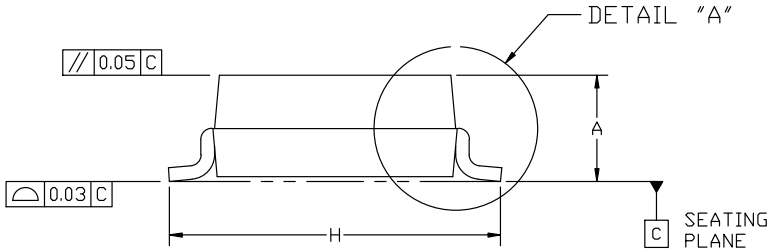


SOD−123 2−LEAD, 1.60x2.69x1.16
CASE 425
ISSUE H

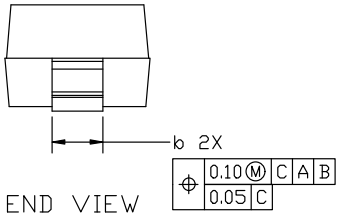
DATE 29 FEB 2024



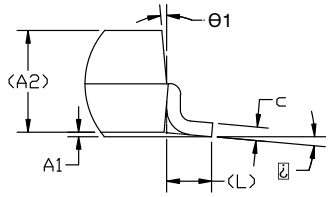
TOP VIEW



SIDE VIEW



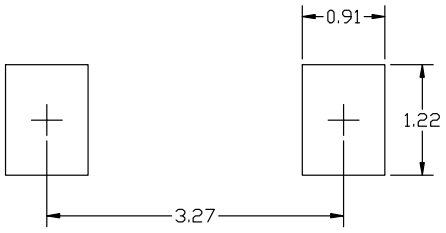
END VIEW



DETAIL "A"

NOTES:
1. DIMENSION AND TOLERANCING PER ASME Y14.5M, 2018
2. CONTROLLING DIMENSION: MILLIMETERS

	MILLIMETER		
DIM	MIN.	NOM.	MAX.
A	0.94	1.17	1.35
A1	0.00	0.05	0.10
A2		1.16 REF.	
b	0.51	0.61	0.71
c	–	–	0.15
D	1.40	1.60	1.80
E	2.54	2.69	2.84
H	3.56	3.68	3.86
L		0.25 REF.	
∠	0°		10°
θ1	0°		10°



RECOMMENDED MOUNTING FOOTPRINT

*For additional information on or Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference manual SOLDERRM/D.

GENERIC MARKING DIAGRAM*



XXX = Specific Device Code
M = Date Code
▪ = Pb−Free Package
(Note: Microdot may be in either location)

*This information is generic. Please refer to device data sheet for actual part marking. Pb−Free indicator, "G" or microdot "▪", may or may not be present. Some products may not follow the Generic Marking.

STYLE 1:
PIN 1. CATHODE
2. ANODE

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DESCRIPTION:	**SOD−123 2−LEAD, 1.60x2.69x1.16**	**PAGE 1 OF 1**

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