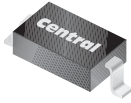


CMHD4448

**SURFACE MOUNT  
HIGH SPEED SILICON  
SWITCHING DIODE**



**SOD-123 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHD4448 type is a ultra-high speed silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a SOD-123 surface mount package, designed for high speed switching applications.

**MARKING CODE: C48**

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Continuous Reverse Voltage  
Peak Repetitive Reverse Voltage  
Continuous Forward Current  
Peak Repetitive Forward Current  
Peak Forward Surge Current,  $t_p=1.0\mu\text{s}$   
Peak Forward Surge Current,  $t_p=1.0\text{s}$   
Power Dissipation  
Operating and Storage Junction Temperature  
Thermal Resistance

**SYMBOL**

$V_R$  75  
 $V_{RRM}$  100  
 $I_F$  250  
 $I_{FRM}$  500  
 $I_{FSM}$  4.0  
 $I_{FSM}$  1.0  
 $P_D$  400  
 $T_J, T_{stg}$  -65 to +150  
 $\Theta_{JA}$  312.5

**UNITS**

V  
V  
mA  
mA  
A  
A  
mW  
 $^\circ\text{C}$   
 $^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=20\text{V}$		25	nA
$I_R$	$V_R=20\text{V}, T_C=25^\circ\text{C}$		50	$\mu\text{A}$
$I_R$	$V_R=75\text{V}$		5.0	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	100		V
$V_F$	$I_F=5.0\text{mA}$	0.62	0.72	V
$V_F$	$I_F=100\text{mA}$		1.0	V
$C_T$	$V_R=0, f=1.0\text{MHz}$		4.0	pF
$t_{rr}$	$V_R=6.0\text{V}, I_F=10\text{mA}, I_R=1.0\text{mA}, R_L=100\Omega$		4.0	ns

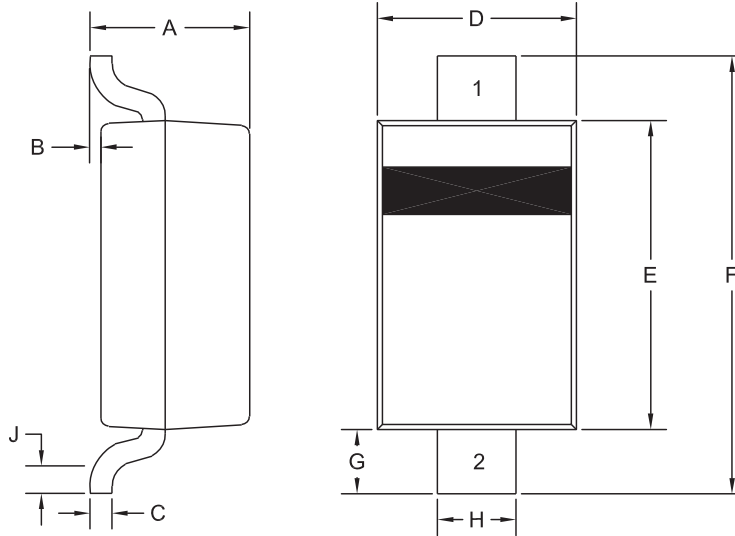
R7 (5-August 2010)

CMHD4448

SURFACE MOUNT  
HIGH SPEED SILICON  
SWITCHING DIODE



SOD-123 CASE - MECHANICAL OUTLINE



R5

LEAD CODE

- 1) Cathode
- 2) Anode

MARKING CODE: C48

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	0.000	0.005	0.00	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.110	2.50	2.80
F	0.142	0.154	3.60	3.90
G	0.016	-	0.40	-
H	0.020	0.028	0.50	0.70
J	0.010	-	0.25	-

SOD-123 (REV:R5)

R7 (5-August 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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