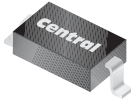


CMHD2003

**SURFACE MOUNT  
HIGH VOLTAGE SILICON  
SWITCHING DIODE**



**SOD-123 CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHD2003 is a Silicon Switching Diode, manufactured by the epitaxial planar process, epoxy molded in a SOD-123 surface mount package, designed for applications requiring high voltage capability.

**MARKING CODE: C03**

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

	<b>SYMBOL</b>		<b>UNITS</b>
Continuous Reverse Voltage	$V_R$	250	V
Continuous Forward Current	$I_F$	250	mA
Average Rectified Current	$I_O$	200	mA
Peak Repetitive Forward Current	$I_{FRM}$	625	mA
Peak Forward Surge Current, $t_p < 1.0\text{s}$ ( $T_C=25^\circ\text{C}$ )	$I_{FSM}$	1.0	A
Power Dissipation	$P_D$	400	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	312.5	$^\circ\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=200\text{V}$			100	nA
$I_R$	$V_R=200\text{V}, T_C=100^\circ\text{C}$			15	$\mu\text{A}$
$V_F$	$I_F=100\text{mA}$			1.0	V
$C_T$	$V_R=0, f=1.0\text{MHz}$		1.5		pF
$t_{rr}$	$I_F=I_R=30\text{mA}, R_L=100\Omega, \text{Rec. to } 3.0\text{mA}$			50	ns

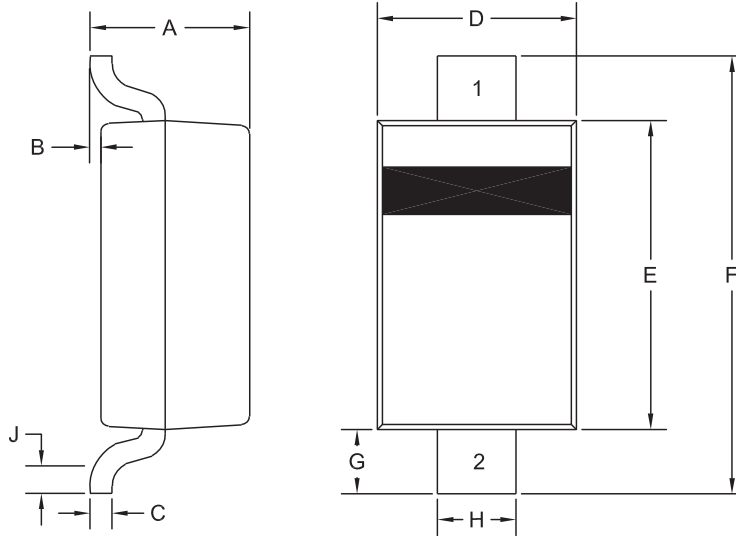
R5 (5-August 2010)

CMHD2003

SURFACE MOUNT  
HIGH VOLTAGE SILICON  
SWITCHING DIODE



SOD-123 CASE - MECHANICAL OUTLINE



R5

LEAD CODE

- 1) Cathode
- 2) Anode

MARKING CODE: C03

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)

R5 (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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