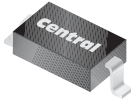


CMHD2003

**SURFACE MOUNT
HIGH VOLTAGE SILICON
SWITCHING DIODE**



SOD-123 CASE



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

	SYMBOL		UNITS
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	θ_{JA}	312.5	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=200\text{V}$			100	nA
I_R	$V_R=200\text{V}, T_C=100^\circ\text{C}$			15	μA
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

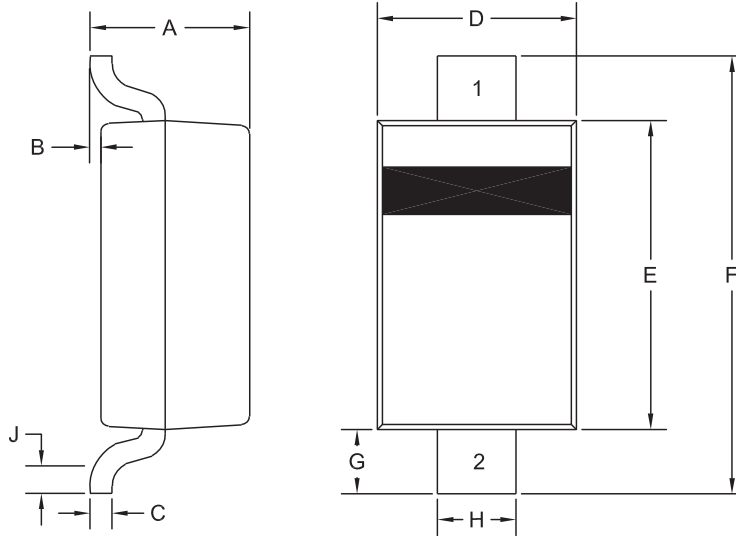
R5 (5-August 2010)

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



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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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