

**CMHD2003**  
**HIGH VOLTAGE**  
**SWITCHING DIODE**



**SOD-123 CASE**

# Central<sup>TM</sup>

**Semiconductor Corp.**

**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**

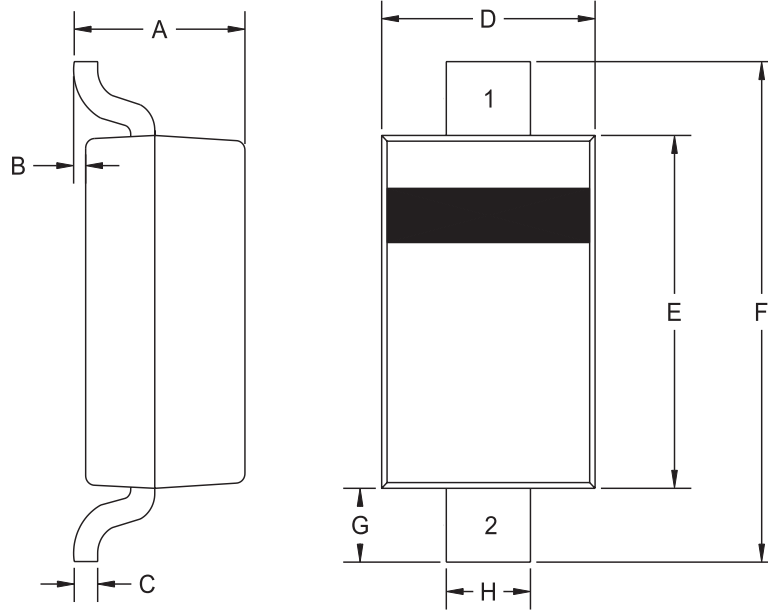
**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

	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
Forward Surge Current, $t_p < 1\text{s}$ , $T_C = 25^\circ\text{C}$	$I_{FSM}$	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)

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	$\mu\text{A}$
$V_F$	$I_F=100\text{mA}$			1.0	V
$C_T$	$V_R=0$ , $f=1\text{ MHz}$		1.5		pF
$t_{rr}$	$I_F=I_R=30\text{mA}$ , $R_L=100\Omega$ , Rec. to 3.0mA			50	ns

**SOD-123 CASE - MECHANICAL OUTLINE**



R4

**LEAD CODE:**

- 1) CATHODE
- 2) ANODE

**MARKING CODE: C03**

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

SOD-123 (REV:R4)