

CMHD2003

**HIGH VOLTAGE
SWITCHING DIODE**



SOD-123 CASE

CentralTM
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 is C03.**

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

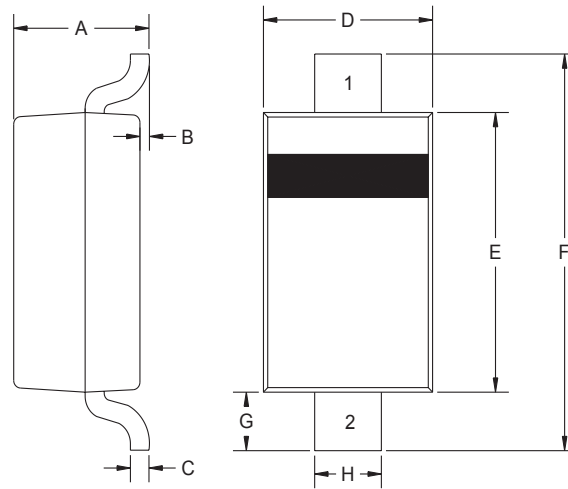
	<u>SYMBOL</u>		<u>UNITS</u>
Continuous Reverse Voltage	V_R	250	V
Continuous Forward Current	I_F	250	mA
Average Rectified Current	I_O	200	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Forward Surge Current, $t_p < 1\text{s}$, $T_C = 25^{\circ}\text{C}$	I_{FSM}	1.0	A
Power Dissipation	P_D	400	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	Θ_{JA}	312.5	$^{\circ}\text{C/W}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
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	$V_R = 0$, $f = 1\text{ MHz}$		1.5		pF
t_{rr}	$I_F = I_R = 30\text{mA}$, $R_L = 100\Omega$, Rec. to 3.0mA			50	ns

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MECHANICAL OUTLINE - SOD-123



R3

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	-	0.005	-	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.112	2.50	2.84
F	0.140	0.154	3.55	3.90
G	0.010	-	0.25	-
H	0.020	0.028	0.50	0.70

SOD-123 (REV:R3)

Lead Code:

- 1) Cathode**
2) Anode

Marking Code is C03.

R2 (2-November 2001)