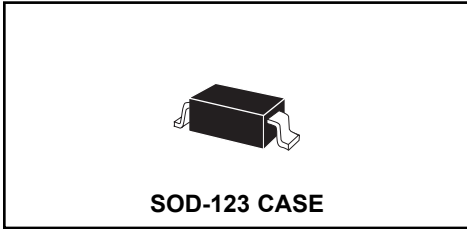


PRELIMINARY

CMHD7006
SURFACE MOUNT
VERY HIGH VOLTAGE
SILICON SWITCHING DIODE



CentralTM

Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMHD7006 is a silicon switching diode manufactured by the epitaxial planar process and packaged in an epoxy molded SOD-123 surface mount case. This device is designed for applications requiring high voltage switching diodes.

MARKING CODE: C76

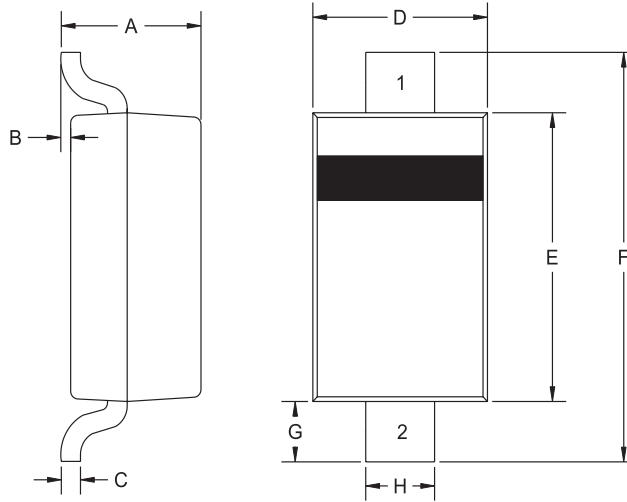
MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V _R	600	V
Peak Repetitive Reverse Voltage	V _{RRM}	600	V
Continuous Forward Current	I _F	100	mA
Peak Repetitive Forward Current	I _{FRM}	300	mA
Forward Surge Current, tp=1.0 μs	I _{FSM}	4.0	A
Forward Surge Current, tp=1.0 s	I _{FSM}	1.0	A
Power Dissipation	P _D	400	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	312.5	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =480V		7.0	100	nA
I _R	V _R =480V, T _A =150°C			100	μA
BV _R	I _R =1.0μA	600	675		V
V _F	I _F =10mA		0.88	1.0	V
V _F	I _F =50mA		1.04	1.2	V
V _F	I _F =100mA		1.16	1.4	V
C _T	V _R =0V, f=1.0 MHz			5.0	pF
t _{rr}	I _R =I _F =10mA, R _L =100Ω, Rec. to 1.0mA			500	ns

SOD-123 CASE - MECHANICAL OUTLINE



R4

LEAD CODE:

- 1) CATHODE
- 2) ANODE

MARKING CODE: C76

SYMBOL	DIMENSIONS			
	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)