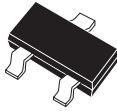


CMPD2003
NEW! **CMPD2003C**
NEW! **CMPD2003S**
CMPD2004
NEW! **CMPD2004C**
CMPD2004S

**SURFACE MOUNT
HIGH VOLTAGE SWITCHING DIODE**



SOT-23 CASE

CentralTM Semiconductor Corp.

DESCRIPTION

The CENTRAL SEMICONDUCTOR CMPD2003, CMPD2003C, CMPD2003S, CMPD2004, CMPD2004C, and CMPD2004S types are silicon switching diodes manufactured by the epitaxial planar process, designed for applications requiring high voltage capability.

The following configurations are available:

CMPD2003	SINGLE	MARKING CODE: A82
CMPD2003C	DUAL, COMMON CATHODE	MARKING CODE: C3C
CMPD2003S	DUAL, IN SERIES	MARKING CODE: C3S
CMPD2004	SINGLE	MARKING CODE: D53
CMPD2004C	DUAL, COMMON CATHODE	MARKING CODE: DB7
CMPD2004S	DUAL, IN SERIES	MARKING CODE: DB6

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

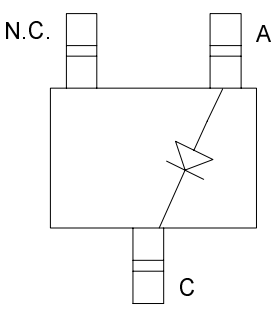
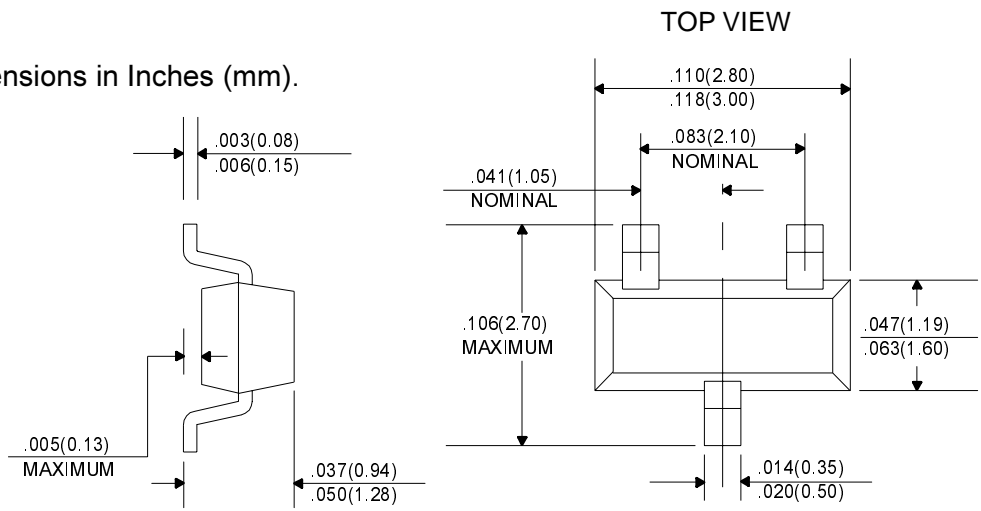
	<u>SYMBOL</u>	<u>CMPD2003</u> <u>CMPD2003C</u> <u>CMPD2003S</u>	<u>CMPD2004</u> <u>CMPD2004C</u> <u>CMPD2004S</u>	<u>UNITS</u>
Continuous Reverse Voltage	V_R	200	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	250	300	V
Peak Repetitive Reverse Current	I_O	200	200	mA
Continuous Forward Current	I_F	250	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	625	mA
Forward Surge Current, $t_p=1$ ms	I_{FSM}	4000	4000	mA
Forward Surge Current, $t_p=1$ s	I_{FSM}	1000	1000	mA
Power Dissipation	P_D		350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JA}	357		$^\circ\text{C/W}$

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

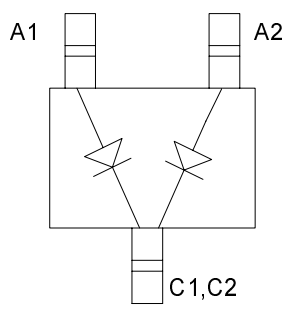
<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>CMPD2003</u> <u>CMPD2003C</u> <u>CMPD2003S</u>		<u>CMPD2004</u> <u>CMPD2004C</u> <u>CMPD2004S</u>		<u>UNIT</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
BV_R	$I_R=100\mu\text{A}$	250		300		V
I_R	$V_R=200\text{V}$		100		-	nA

SYMBOL	TEST CONDITIONS	CMPD2003 CMPD2003C CMPD2003S		CMPD2004 CMPD2004C CMPD2004S		UNIT
		MIN	MAX	MIN	MAX	
I_R	$V_R=200V, T_A=150^\circ C$		100		-	μA
I_R	$V_R=240V$		-		100	nA
I_R	$V_R=240V, T_A=150^\circ C$		-		100	μA
V_F	$I_F=100mA$		1.0		1.0	V
V_F	$I_F=200mA$		1.25		-	V
C_T	$V_R=0, f=1\text{ MHz}$		5.0		5.0	pF
t_{rr}	$I_F=I_R=30mA, \text{Rec. TO } 3.0mA, R_L=100\Omega$		50		50	ns

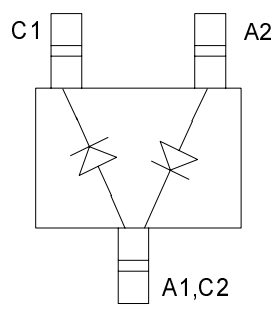
All Dimensions in Inches (mm).



**CMPD2003
CMPD2004**



**CMPD2003C
CMPD2004C**



**CMPD2003S
CMPD2004S**