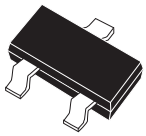
CMPD2003
NEW! CMPD2003C
NEW! CMPD2003S
CMPD2004
NEW! CMPD2004C
CMPD2004S

SURFACE MOUNT
HIGH VOLTAGE SWITCHING DIODE



SOT-23 CASE

Central™
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°C)

	SYMBOL	CMPD2003 CMPD2003C CMPD2003S	CMPD2004 CMPD2004C CMPD2004S	UNITS
Continuous Reverse Voltage	V_R	200	240	V
Peak RepetitiveReverse 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, tp=1 ms	I_{FSM}	4000	4000	mA
Forward Surge Current, tp=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		°C
Thermal Resistance	Θ_{JA}	357		°C/W

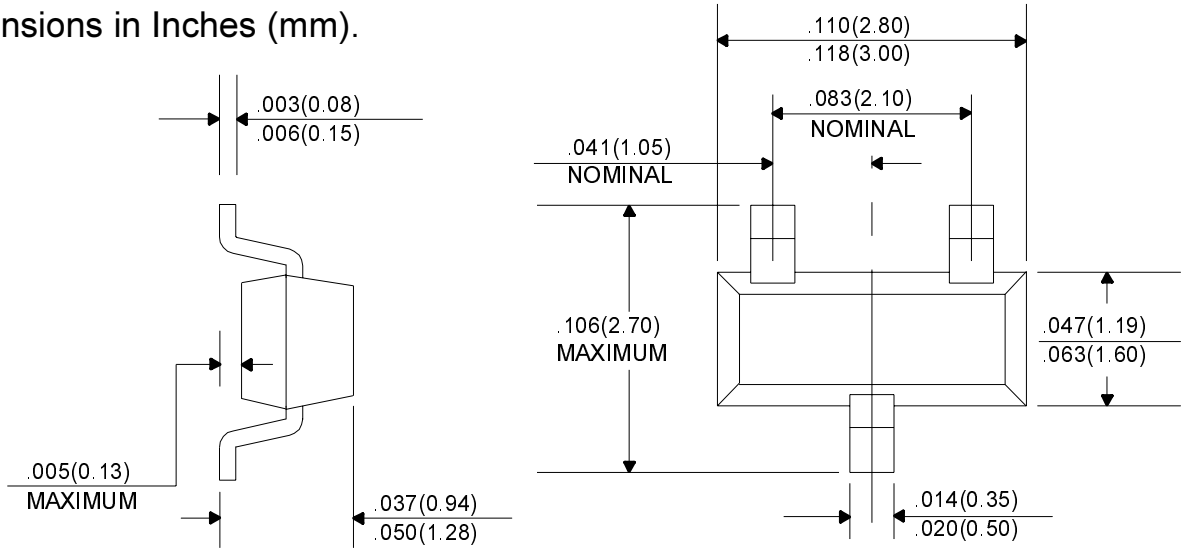
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

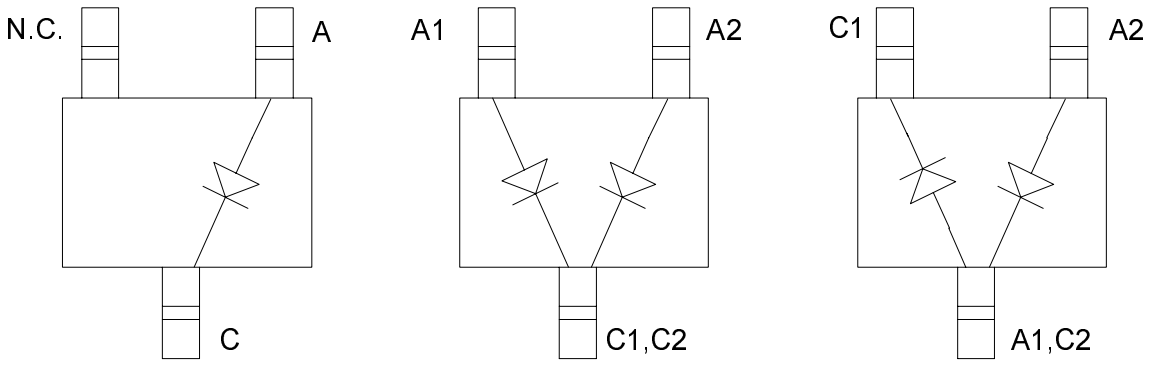
		CMPD2003 CMPD2003C CMPD2003S		CMPD2004 CMPD2004C CMPD2004S		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNIT
BV_R	I_R=100μA	250		300		V
I_R	V_R=200V		100		-	nA

SYMBOL	TEST CONDITIONS	CMPD2003 CMPD2003C CMPD2003S MIN	CMPD2003 CMPD2003C CMPD2003S MAX	CMPD2004 CMPD2004C CMPD2004S MIN	CMPD2004 CMPD2004C CMPD2004S MAX	UNIT
I_R	V_R=200V, T_A=150°C		100		-	μA
I_R	V_R=240V		-		100	nA
I_R	V_R=240V, T_A=150°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 MHz		5.0		5.0	pF
t_{rr}	I_F=I_R=30mA, Rec. TO 3.0mA, R_L=100Ω		50		50	ns

TOP VIEW

All Dimensions in Inches (mm).





CMPD2003
CMPD2004

CMPD2003C
CMPD2004C

CMPD2003S
CMPD2004S

R3