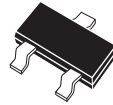


CMPD2003    CMPD2004  
 CMPD2003C    CMPD2004A  
 CMPD2003S    CMPD2004C  
                   CMPD2004S

**SURFACE MOUNT  
 HIGH VOLTAGE  
 SILICON SWITCHING DIODE**



**SOT-23 CASE**

# Central™

**Semiconductor Corp.**

**DESCRIPTION:**

The Central Semiconductor CMPD2003, CMPD2003C, CMPD2003S, CMPD2004, CMPD2004A, 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:

<b>CMPD2003</b>	SINGLE	<b>MARKING CODE: A82</b>
<b>CMPD2003C</b>	DUAL, COMMON CATHODE	<b>MARKING CODE: C3C</b>
<b>CMPD2003S</b>	DUAL, IN SERIES	<b>MARKING CODE: C3S</b>
<b>CMPD2004</b>	SINGLE	<b>MARKING CODE: D53</b>
<b>CMPD2004A</b>	DUAL, COMMON ANODE	<b>MARKING CODE: DB8</b>
<b>CMPD2004C</b>	DUAL, COMMON CATHODE	<b>MARKING CODE: DB7</b>
<b>CMPD2004S</b>	DUAL, IN SERIES	<b>MARKING CODE: DB6</b>

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

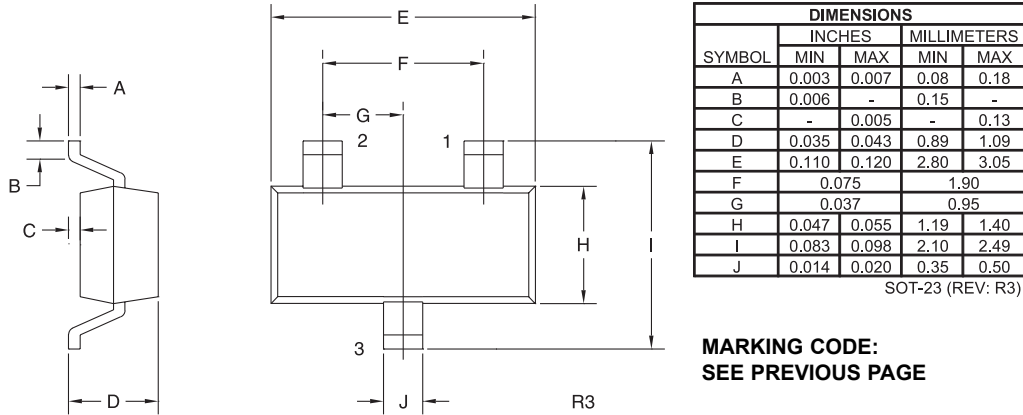
	<b>SYMBOL</b>	<b>CMPD2003 CMPD2003C CMPD2003S</b>	<b>CMPD2004 CMPD2004A CMPD2004C CMPD2004S</b>	<b>UNITS</b>
Continuous Reverse Voltage	$V_R$	200	240	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	250	300	V
Peak Repetitive Reverse Current	$I_O$	200	200	mA
Continuous Forward Current	$I_F$	250	225	mA
Peak Repetitive Forward Current	$I_{FRM}$	625		mA
Forward Surge Current, $t_p=1.0 \mu\text{s}$	$I_{FSM}$	4.0		A
Forward Surge Current, $t_p=1.0 \text{ s}$	$I_{FSM}$	1.0		A
Power Dissipation	$P_D$	350		mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	357		$^\circ\text{C/W}$

**SURFACE MOUNT  
HIGH VOLTAGE  
SILICON SWITCHING DIODE**

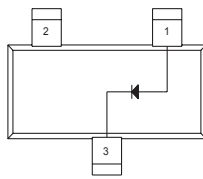
ELECTRICAL CHARACTERISTICS PER DIODE: ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	CMPD2003 CMPD2003C CMPD2003S		CMPD2004 CMPD2004A CMPD2004C CMPD2004S		UNITS
		MIN	MAX	MIN	MAX	
$BV_R$	$I_R=100\mu\text{A}$	250		300		V
$I_R$	$V_R=200\text{V}$		100	-		nA
$I_R$	$V_R=200\text{V}, T_A=150^\circ\text{C}$		100	-		$\mu\text{A}$
$I_R$	$V_R=240\text{V}$		-	100		nA
$I_R$	$V_R=240\text{V}, T_A=150^\circ\text{C}$		-	100		$\mu\text{A}$
$V_F$	$I_F=100\text{mA}$		1.0	1.0		V
$V_F$	$I_F=200\text{mA}$		1.25	-		V
$C_T$	$V_R=0\text{V}, f=1.0\text{ MHz}$		5.0	5.0		pF
$t_{rr}$	$I_R=I_F=30\text{mA}, R_L=100\Omega, \text{Rec. to } 3.0\text{mA}$		50	50		ns

**SOT-23 CASE - MECHANICAL OUTLINE**



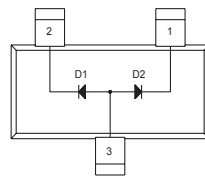
**MARKING CODE:  
SEE PREVIOUS PAGE**



**LEAD CODE:**

**CMPD2003  
CMPD2004**

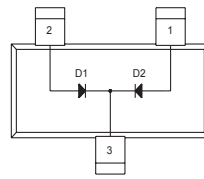
- 1) Anode
- 2) No Connection
- 3) Cathode



**LEAD CODE:**

**CMPD2004A**

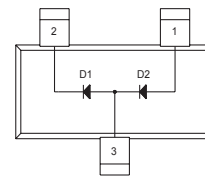
- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, Anode D2



**LEAD CODE:**

**CMPD2003C  
CMPD2004C**

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, Cathode D2



**LEAD CODE:**

**CMPD2003S  
CMPD2004S**

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2