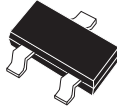


**CMPD2003  
CMPD2004  
CMPD2004S**

**HIGH VOLTAGE  
SWITCHING DIODE**



**SOT-23 CASE**

**Central**<sup>TM</sup>  
Semiconductor Corp.

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPD2003, CMPD2004, 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
CMPD2004	SINGLE
CMPD2004S	DUAL, IN SERIES

**MARKING CODE: A82**  
**MARKING CODE: D53**  
**MARKING CODE: DB6**

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

	<b>SYMBOL</b>	<b>CMPD2003</b>	<b>CMPD2004 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	625	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	$I_{FSM}$	4000	4000	mA
Forward Surge Current, $t_p=1 \text{ s}$	$I_{FSM}$	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	$\Theta_{JA}$		357	$^{\circ}\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>CMPD2003</b>		<b>CMPD2004 CMPD2004S</b>		<b>UNIT</b>
		<b>MIN</b>	<b>MAX</b>	<b>MIN</b>	<b>MAX</b>	
$B_{VR}$	$I_R=100 \mu\text{A}$	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

SYMBOL	TEST CONDITIONS	CMPD2003		CMPD2004 CMPD2004S		UNIT
		MIN	MAX	MIN	MAX	
$V_F$	$I_F=200\text{mA}$		1.25		-	V
$C_T$	$V_R=0, f=1\text{ MHz}$		5.0		5.0	pF
$t_{rr}$	$I_F=I_R=30\text{mA}, \text{RECOV. TO } 3.0\text{mA},$ $R_L=100\Omega$		50		50	ns

All dimensions in inches (mm).

