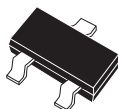


**CMPD2003  
CMPD2004  
CMPD2004S**

**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<sub>A</sub>=25°C)

	SYMBOL	CMPD2003	CMPD2004 CMPD2004S	UNITS
Continuous Reverse Voltage	V <sub>R</sub>	200	240	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	250	300	V
Peak Repetitive Reverse Current	I <sub>O</sub>	200	200	mA
Continuous Forward Current	I <sub>F</sub>	250	225	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	625	625	mA
Forward Surge Current, tp=1 μs	I <sub>FSM</sub>	4000	4000	mA
Forward Surge Current, tp=1 s	I <sub>FSM</sub>	1000	1000	mA
Power Dissipation	P <sub>D</sub>	350		mW
Operating and Storage				
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150		°C
Thermal Resistance	Θ <sub>JA</sub>	357		°C/W

# ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	CMPD2003		CMPD2004 CMPD2004S		UNIT
		MIN	MAX	MIN	MAX	
B <sub>V</sub> R	I <sub>R</sub> =100 μA	250		300		V
I <sub>R</sub>	V <sub>R</sub> =200V		100		-	nA
I <sub>R</sub>	V <sub>R</sub> =200V, T <sub>A</sub> =150°C		100		-	μA
I <sub>R</sub>	V <sub>R</sub> =240V		-		100	nA
I <sub>R</sub>	V <sub>R</sub> =240V, T <sub>A</sub> =150°C		-		100	μA
V <sub>F</sub>	I <sub>F</sub> =100mA		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
$t_{rr}$	$I_F=I_R=30\text{mA}$ , RECOV. TO $3.0\text{mA}$ , $R_L=100\Omega$		50		50	ns

All dimensions in inches (mm).

