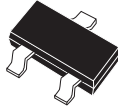


**CMPD2003
CMPD2004
CMPD2004S**

**HIGH VOLTAGE
SWITCHING DIODE**



SOT-23 CASE

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

	SYMBOL	CMPD2004		UNITS
		CMPD2003	CMPD2004S	
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	Θ_{JA}	357		$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	CMPD2003		CMPD2004		UNIT
		MIN	MAX	MIN	MAX	
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	-		μA
I_R	$V_R=240\text{V}$		-	100		nA
I_R	$V_R=240\text{V}, T_A=150^{\circ}\text{C}$		-	100		μA
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).

