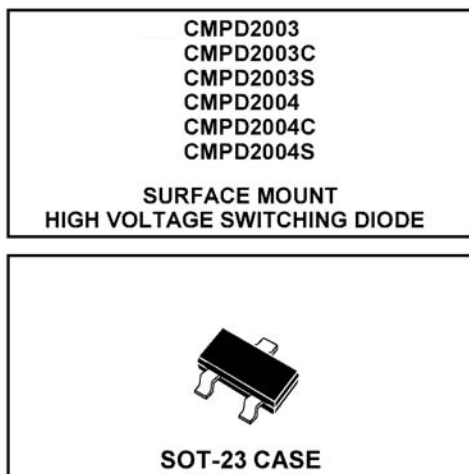




CentralTM **Semiconductor Corp.**

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
CMPD2003C	DUAL, COMMON CATHODE
CMPD2003S	DUAL, IN SERIES
CMPD2004	SINGLE
CMPD2004C	DUAL, COMMON CATHODE
CMPD2004S	DUAL, IN SERIES

MARKING CODE: A82
MARKING CODE: C3C
MARKING CODE: C3S
MARKING CODE: D53
MARKING CODE: DB7
MARKING CODE: DB6

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

	SYMBOL	CMPD2003 CMPD2003C CMPD2003S	CMPD2004 CMPD2004C CMPD2004S	UNITS
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, $t_p=1$ ms	I_{FSM}	4000	4000	mA
Forward Surge Current, $t_p=1$ s	I_{FSM}	1000	1000	mA
Power Dissipation	P_D	350		mW
Operating and Storage				
Junction Temperature	T_J, T_{stg}	-65 to +150		$^{\circ}\text{C}$
Thermal Resistance	Θ_{JA}	357		$^{\circ}\text{C/W}$

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

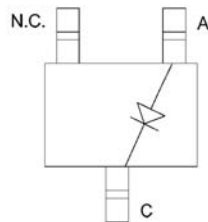
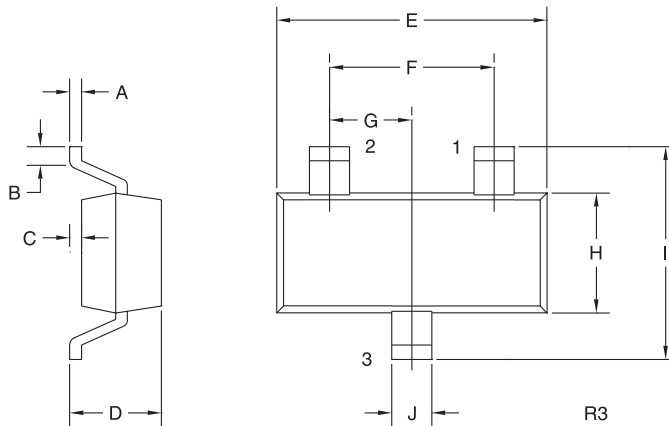
SYMBOL	TEST CONDITIONS	CMPD2003 CMPD2003C CMPD2003S		CMPD2004 CMPD2004C CMPD2004S		UNIT
		MIN	MAX	MIN	MAX	
BV_R	$I_R=100\mu\text{A}$	250		300		V
I_R	$V_R=200\text{V}$		100		-	nA

SYMBOL	TEST CONDITIONS	CMPD2003 CMPD2003C CMPD2003S		CMPD2004 CMPD2004C CMPD2004S		UNIT
		MIN	MAX	MIN	MAX	
I_R	$V_R=200V$, $T_A=150^{\circ}C$		100	-		μA
I_R	$V_R=240V$		-	100		nA
I_R	$V_R=240V$, $T_A=150^{\circ}C$		-	100		μA
V_F	$I_F=100mA$		1.0	1.0		V
V_F	$I_F=200mA$		1.25	-		V
C_T	$V_R=0$, $f=1\text{ MHz}$		5.0	5.0		pF
t_{rr}	$I_F=I_R=30mA$, Rec. TO 3.0mA, $R_L=100\Omega$		50	50		ns

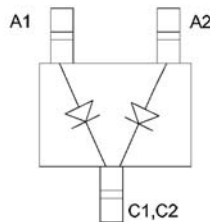
SOT-23 CASE - MECHANICAL OUTLINE

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

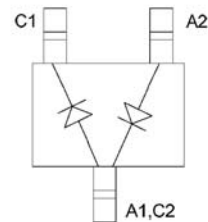
SOT-23 (REV: R3)



**CMPD2003
CMPD2004**



**CMPD2003C
CMPD2004C**



**CMPD2003S
CMPD2004S**