CMPD2003 **CMPD2004**
CMPD2003A **CMPD2004A**
CMPD2003C **CMPD2004C**
CMPD2003S **CMPD2004S**

SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE



SOT-23 CASE

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD2003, CMPD2003A, 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:

CMPD2003	SINGLE	**MARKING CODE: A82**
CMPD2003A	DUAL, COMMON ANODE	**MARKING CODE: 8A2**
CMPD2003C	DUAL, COMMON CATHODE	**MARKING CODE: C3C**
CMPD2003S	DUAL, IN SERIES	**MARKING CODE: C3S**
CMPD2004	SINGLE	**MARKING CODE: D53**
CMPD2004A	DUAL, COMMON ANODE	**MARKING CODE: DB8**
CMPD2004C	DUAL, COMMON CATHODE	**MARKING CODE: DB7**
CMPD2004S	DUAL, IN SERIES	**MARKING CODE: DB6**

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**	**CMPD2003 CMPD2003A CMPD2003C CMPD2003S**	**CMPD2004 CMPD2004A CMPD2004C CMPD2004S**	**UNITS**
Continuous Reverse Voltage	V_R	200	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	250	300	V
Average Forward Current	I_O	200	200	mA
Continous Forward Current	I_F	250	225	mA
Peak Repetitive Forward Current	I_{FRM}	625		mA
Peak Forward Surge Current, tp=1.0μs	I_{FSM}	4.0		A
Peak Forward Surge Current, tp=1.0s	I_{FSM}	1.0		A
Power Dissipation	P_D	350		mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150		°C
Thermal Resistance	Θ_{JA}	357		°C/W

R9 (25-January 2010)

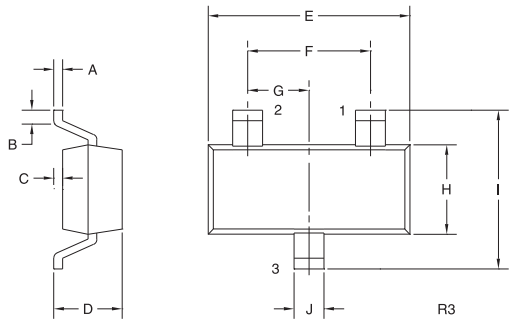
CMPD2003 **CMPD2004**
CMPD2003A **CMPD2004A**
CMPD2003C **CMPD2004C**
CMPD2003S **CMPD2004S**

SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

		CMPD2003 CMPD2003A CMPD2003C CMPD2003S		CMPD2004 CMPD2004A CMPD2004C CMPD2004S		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_R	V_R=200V	-	100	-	-	nA
I_R	V_R=200V, T_A=150°C	-	100	-	-	μA
I_R	V_R=240V	-	-	-	100	nA
I_R	V_R=240V, T_A=150°C	-	-	-	100	μA
BV_R	I_R=100μA	250	-	300	-	V
V_F	I_F=100mA	-	1.0	-	1.0	V
V_F	I_F=200mA	-	1.25	-	-	V
C_T	V_R=0, f=1.0MHz	-	5.0	-	5.0	pF
t_{rr}	I_R=I_F=30mA, R_L=100Ω, Rec. to 3.0mA	-	50	-	50	ns

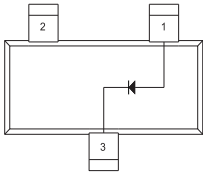
SOT-23 CASE - MECHANICAL OUTLINE



DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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

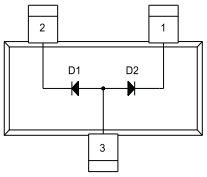
SOT-23 (REV: R3)

PIN CONFIGURATIONS



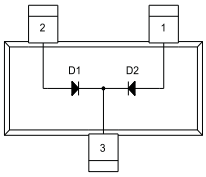
CMPD2003
CMPD2004

LEAD CODE:
1) Anode
2) No Connection
3) Cathode



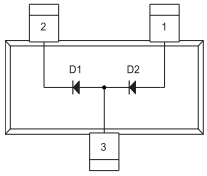
CMPD2003A
CMPD2004A

LEAD CODE:
1) Cathode D2
2) Cathode D1
3) Anode D1, D2



CMPD2003C
CMPD2004C

LEAD CODE:
1) Anode D2
2) Anode D1
3) Cathode D1, D2



CMPD2003S
CMPD2004S

LEAD CODE:
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2

MARKING CODE: SEE PREVIOUS PAGE

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