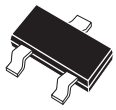
CMPD2003 **CMPD2004**
CMPD2003C **CMPD2004A**
CMPD2003S **CMPD2004C**
CMPD2004S

SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE



SOT-23 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMPD2003, 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**
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 CMPD2003C CMPD2003S	CMPD2004 CMPD2004A 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
Continous Forward Current	I_F	250	225	mA
Peak Repetitive Forward Current	I_{FRM}	625		mA
Forward Surge Current, tp=1.0 μs	I_{FSM}	4.0		A
Forward Surge Current, tp=1.0 s	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

R7 (6-August 2003)

Central™
Semiconductor Corp.

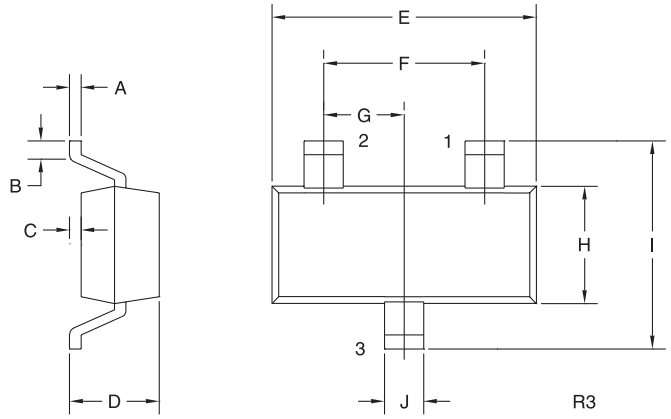
CMPD2003 CMPD2004
CMPD2003C CMPD2004A
CMPD2003S CMPD2004C
CMPD2004S

SURFACE MOUNT HIGH VOLTAGE SILICON SWITCHING DIODE

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

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

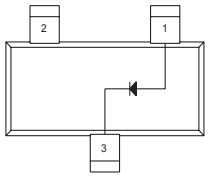
SOT-23 CASE - MECHANICAL OUTLINE



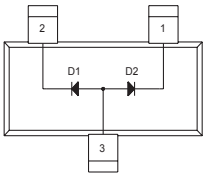
DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

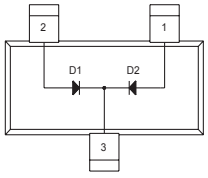
MARKING CODE:
SEE PREVIOUS PAGE



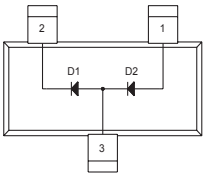
LEAD CODE:
CMPD2003
CMPD2004
1) Anode
2) No Connection
3) Cathode



LEAD CODE:
CMPD2004A
1) Cathode D2
2) Cathode D1
3) Anode D1, Anode D2



LEAD CODE:
CMPD2003C
CMPD2004C
1) Anode D2
2) Anode D1
3) Cathode D1, Cathode D2



LEAD CODE:
CMPD2003S
CMPD2004S
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2

R7 (6-August 2003)