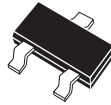


CMPD2003
CMPD2003C
CMPD2003S

CMPD2004
CMPD2004A
CMPD2004C
CMPD2004S

**SURFACE MOUNT
HIGH VOLTAGE
SILICON SWITCHING DIODE**



SOT-23 CASE

CentralTM

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
CMPD2003C	DUAL, COMMON CATHODE
CMPD2003S	DUAL, IN SERIES
CMPD2004	SINGLE
CMPD2004A	DUAL, COMMON ANODE
CMPD2004C	DUAL, COMMON CATHODE
CMPD2004S	DUAL, IN SERIES

MARKING CODE: A82
MARKING CODE: C3C
MARKING CODE: C3S
MARKING CODE: D53
MARKING CODE: DB8
MARKING CODE: DB7
MARKING CODE: DB6

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

	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
Continuous Forward Current	I_F	250	225	mA
Peak Repetitive Forward Current	I_{FRM}	625		mA
Forward Surge Current, $t_p=1.0 \mu\text{s}$	I_{FSM}	4.0		A
Forward Surge Current, $t_p=1.0 \text{ s}$	I_{FSM}	1.0		A
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		$^{\circ}\text{C/W}$

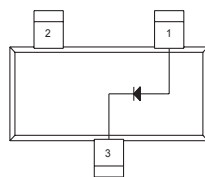
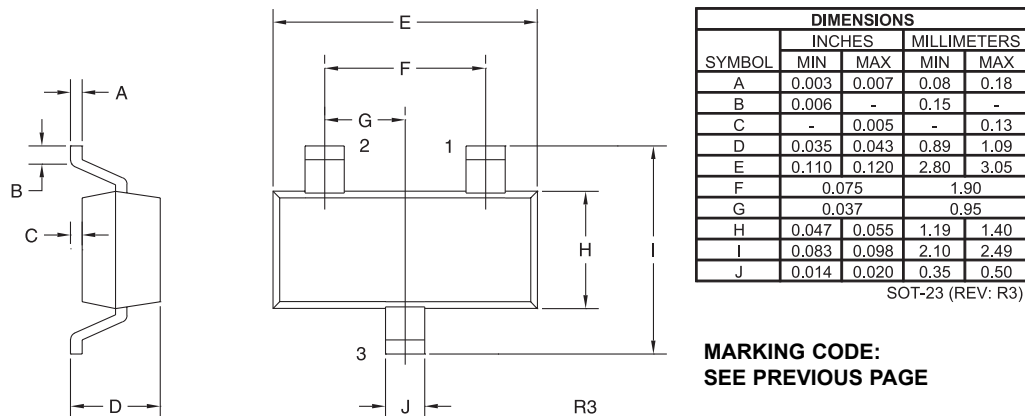
R7 (6-August 2003)

SURFACE MOUNT HIGH VOLTAGE SILICON SWITCHING DIODE

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

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

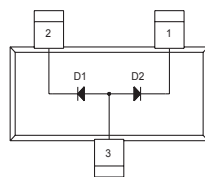
SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

**CMPD2003
CMPD2004**

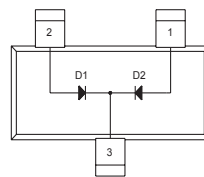
- 1) Anode
- 2) No Connection
- 3) Cathode



LEAD CODE:

CMPD2004A

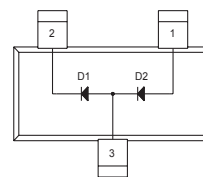
- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, Anode D2



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)