

CMXD2004S
CMXD2004SR

**SURFACE MOUNT
DUAL PAIR, IN-SERIES
HIGH VOLTAGE
SILICON SWITCHING DIODES**

SUPERmini™



SOT-26 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMXD2004S and CMXD2004SR consists of Dual Pair, In-Series pairs of High Voltage Silicon Switching Diodes, manufactured in a SUPERmini™ SOT-26 surface mount package, and designed for high voltage switching applications. This device can be configured as a 1200V switching diode, or as a bridge rectifier. See optional mounting pad configurations on following page.

**MARKING CODES: CMXD2004S: CX04S
CMXD2004SR: C04SR**

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

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Average Forward Current
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R
 V_{RRM}
 I_O
 I_F
 I_{FRM}
 I_{FSM}
 I_{FSM}
 P_D
 T_J, T_{stg}
 θ_{JA}

240
300
200
225
625
4.0
1.0
350
-65 to +150
357

UNITS

V
V
mA
mA
mA
A
A
mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_R	$V_R=240\text{V}$		100	nA
I_R	$V_R=240\text{V}, T_A=150^\circ\text{C}$		100	μA
BV_R	$I_R=100\mu\text{A}$	300		V
V_F	$I_F=100\text{mA}$		1.0	V
C_T	$V_R=0, f=1.0\text{MHz}$		5.0	pF
t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=3.0\text{mA}, R_L=100\Omega$		50	ns

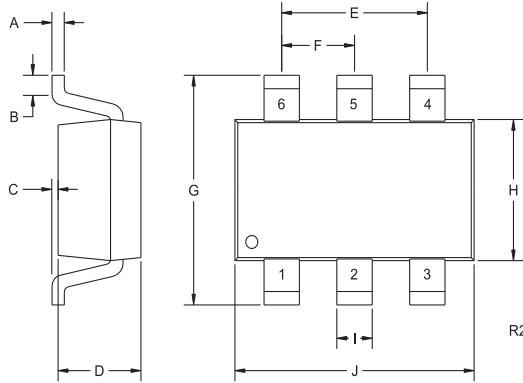
R3 (12-February 2010)

CMXD2004S
CMXD2004SR

SURFACE MOUNT
DUAL PAIR, IN-SERIES
HIGH VOLTAGE
SILICON SWITCHING DIODES



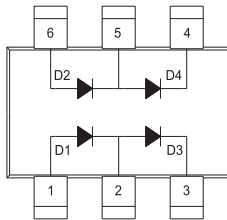
SOT-26 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016		0.41	
J	0.110	0.118	2.80	3.00

SOT-26 (REV: R2)

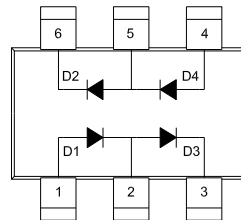
PIN CONFIGURATION



- LEAD CODE:**
- 1) Anode D1
 - 2) Cathode D1, Anode D3
 - 3) Cathode D3
 - 4) Cathode D4
 - 5) Anode D4, Cathode D2
 - 6) Anode D2

CMXD2004S
MARKING CODE: CX04S

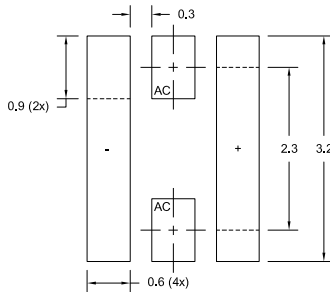
PIN CONFIGURATION



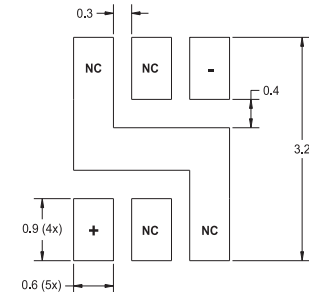
- LEAD CODE:**
- 1) Anode D1
 - 2) Cathode D1, Anode D3
 - 3) Cathode D3
 - 4) Anode D4
 - 5) Cathode D4, Anode D2
 - 6) Cathode D2

CMXD2004SR
MARKING CODE: CX04SR

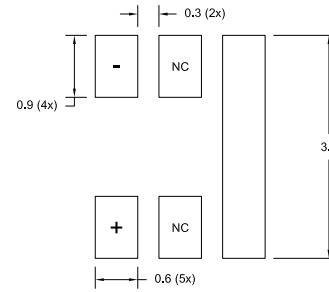
OPTIONAL MOUNTING PADS (Dimensions in mm)



For Bridge Configuration
CMXD2004S



For 1200V Series Configuration
CMXD2004S



For 1200V Series Configuration
CMXD2004SR

R3 (12-February 2010)