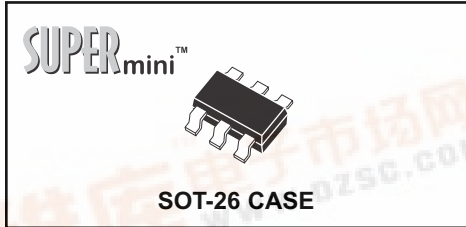


CMXD2004S  
CMXD2004SR  
SURFACE MOUNT SUPERmini™  
DUAL, IN-SERIES  
HIGH VOLTAGE  
SWITCHING DIODES



# Central™

## Semiconductor Corp.

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMXD2004S and CMXD2004SR consists of Dual, 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<sub>A</sub>=25°C unless otherwise noted)

	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	240	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	300	V
Peak Repetitive Reverse Current	I <sub>O</sub>	200	mA
Continuous Forward Current	I <sub>F</sub>	225	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	625	mA
Forward Surge Current, tp=1 μs	I <sub>FSM</sub>	4.0	A
Forward Surge Current, tp=1 s	I <sub>FSM</sub>	1.0	A
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

### ELECTRICAL CHARACTERISTICS PER DIODE (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I <sub>R</sub>	V <sub>R</sub> =240V		100	nA
I <sub>R</sub>	V <sub>R</sub> =240V, T <sub>A</sub> =150°C		100	μA
BV <sub>R</sub>	I <sub>R</sub> =100μA	300		V
V <sub>F</sub>	I <sub>F</sub> =100mA		1.0	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1 MHz		5.0	pF
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =30mA, Rec. To 3.0mA, R <sub>L</sub> =100Ω		50	ns

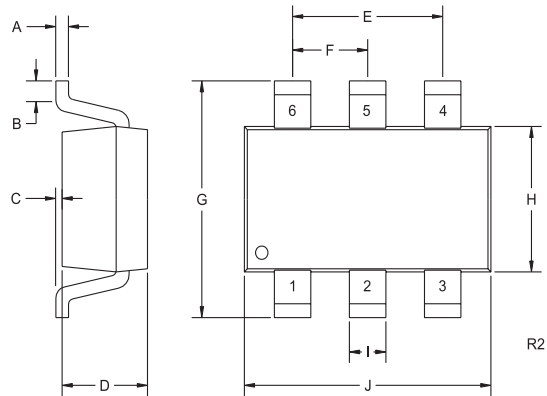
R2 (25-August 2005)

**SURFACE MOUNT SUPERmini<sup>TM</sup>**  
**DUAL, IN-SERIES**  
**HIGH VOLTAGE**  
**SWITCHING DIODES**

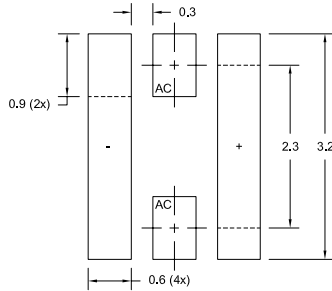
**SOT-26 CASE - MECHANICAL OUTLINE**

SYMBOL	DIMENSIONS			
	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

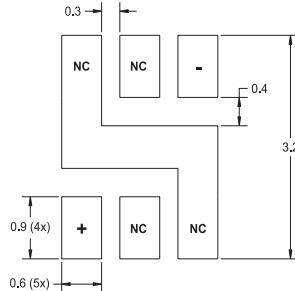
SOT-26 (REV: R2)



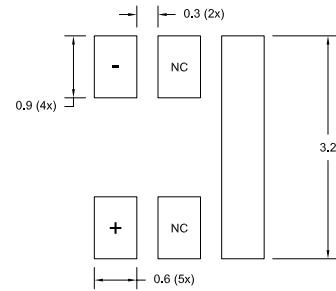
**OPTIONAL MOUNTING PAD LAYOUTS** (Dimensions in mm)



For Bridge Configuration  
CMXD2004S

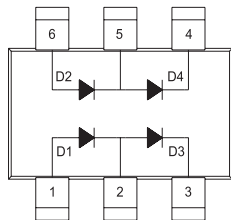


For 1200V Series Configuration  
CMXD2004S



For 1200V Series Configuration  
CMXD2004SR

**PIN CONFIGURATION**

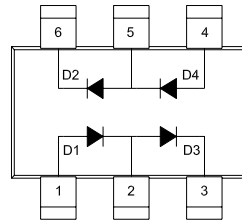


**MARKING CODE:**  
CMXD2004S: CX04S

**LEAD CODE**

- 1) ANODE D1
- 2) CATHODE D1,  
ANODE D3
- 3) CATHODE D3
- 4) CATHODE D4
- 5) ANODE D4,  
CATHODE D2
- 6) ANODE D2

**PIN CONFIGURATION**



**MARKING CODE:**  
CMXD2004SR: C04SR

**LEAD CODE**

- 1) ANODE D1
- 2) CATHODE D1,  
ANODE D3
- 3) CATHODE D3
- 4) ANODE D4
- 5) CATHODE D4,  
ANODE D2
- 6) CATHODE D2