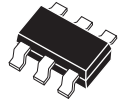


CMXD2004S
CMXD2004SR

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

SUPERmini™



SOT-26 CASE

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 ($T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Peak Repetitive Reverse Current	I_O	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	I_{FSM}	4.0	A
Forward Surge Current, $t_p=1 \text{ s}$	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	$^\circ\text{C/W}$

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	$V_R=0, f=1 \text{ MHz}$		5.0	pF
t_{rr}	$I_F=I_R=30\text{mA}, \text{Rec. To } 3.0\text{mA}, R_L=100\Omega$		50	ns

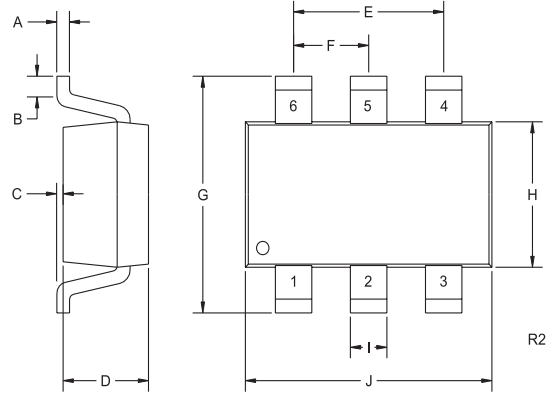
R2 (25-August 2005)

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

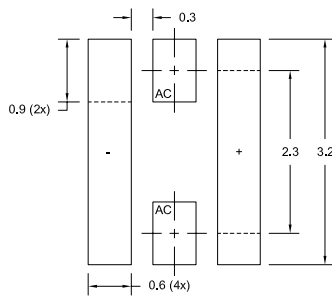
SOT-26 CASE - MECHANICAL OUTLINE

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

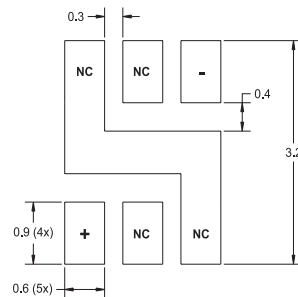
SOT-26 (REV: R2)



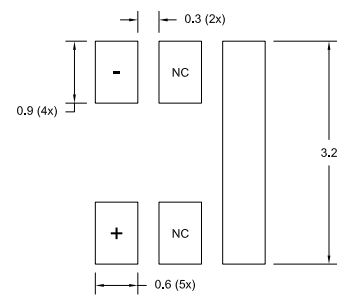
OPTIONAL MOUNTING PAD LAYOUTS (Dimensions in mm)



**For Bridge Configuration
CMXD2004S**

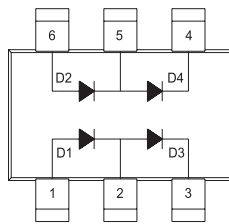


**For 1200V Series Configuration
CMXD2004S**



**For 1200V Series Configuration
CMXD2004SR**

PIN CONFIGURATION

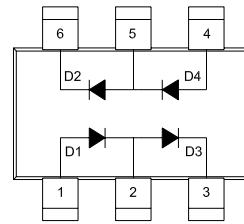


MARKING CODE:
CMXD2004S: CX04S

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

R2 (25-August 2005)