

**CMXD2004TO**  
**SURFACE MOUNT**  
**TRIPLE ISOLATED OPPOSING**  
**HIGH VOLTAGE**  
**SILICON SWITCHING DIODES**



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**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMXD2004TO consists of three (3) Isolated High Voltage Silicon Switching Diodes arranged in an alternating configuration in a SUPERmini SOT-26 surface mount package, and designed for high voltage switching applications. This device can be configured as a 900V switching diode. See optional mounting pad configuration.

**MARKING CODE: X04TO**

**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**

$V_R$	240
$V_{RRM}$	300
$I_O$	200
$I_F$	225
$I_{FRM}$	625
$I_{FSM}$	4.0
$I_{FSM}$	1.0
$P_D$	350
$T_J, T_{stg}$	-65 to +150
$\theta_{JA}$	357

**UNITS**

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

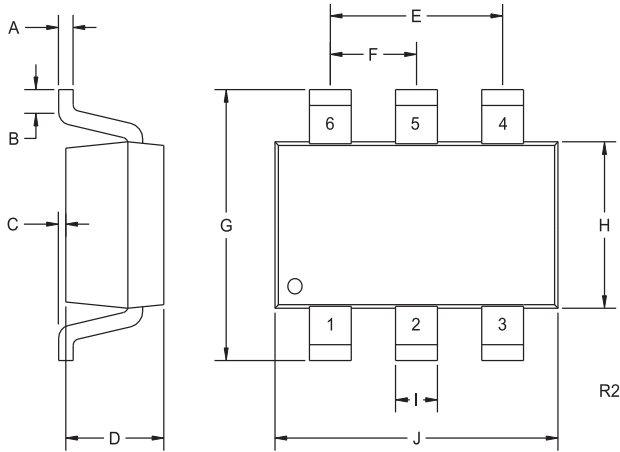
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=240\text{V}$		100	nA
$I_R$	$V_R=240\text{V}, T_A=150^\circ\text{C}$		100	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	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

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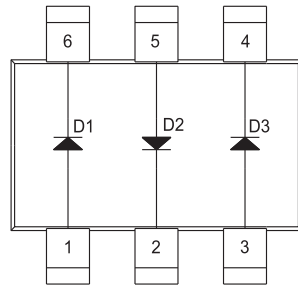
**SOT 26 CASE - MECHANICAL OUTLINE**



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**

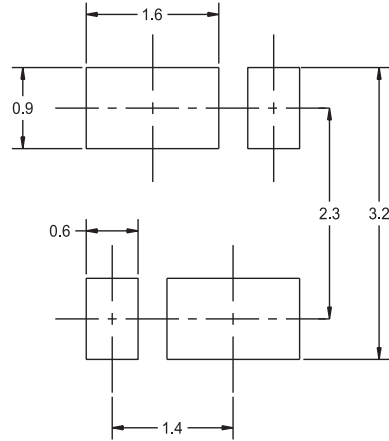


**LEAD CODE:**

- 1) Anode D1
- 2) Cathode D2
- 3) Anode D3
- 4) Cathode D3
- 5) Anode D2
- 6) Cathode D1

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**OPTIONAL MOUNTING PADS**  
**For 900V Series Configuration**  
 (Dimensions in mm)



R0

R2 (12-February 2010)