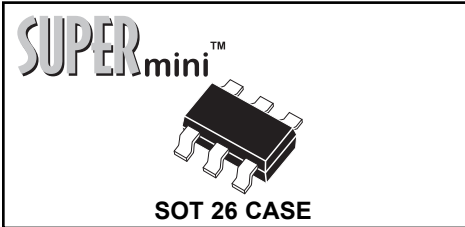


CMXD2004TO
SUPERmini™
TRIPLE ISOLATED OPPOSING
SURFACE MOUNT
HIGH VOLTAGE SWITCHING DIODE



Central™
Semiconductor Corp.

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, designed for high voltage switching applications. This device can be configured as a 900V switching diode. See optional mounting pad configuration.

Marking code is X04TO.

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

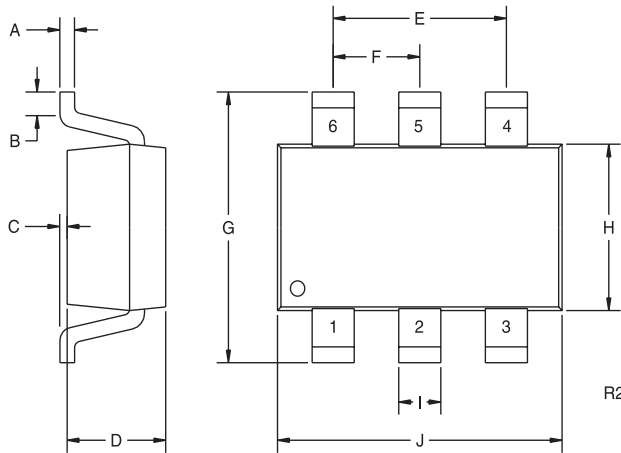
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Peak Repetitive Reverse Current	I_O	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1 \text{ s}$	I_{FSM}	1000	mA
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	UNITS
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

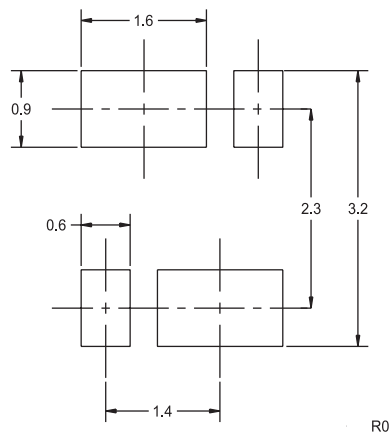
SUPERminiTM
**TRIPLE ISOLATED OPPOSING
SURFACE MOUNT
HIGH VOLTAGE SWITCHING DIODE**

SOT 26 CASE - MECHANICAL OUTLINE

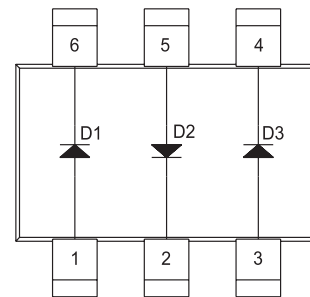


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016		0.41	
J	0.110	0.118	2.80	3.00

SOT-26 (REV: R2)



Optional Mounting Pad Layout
For 900V Series Configuration



LEAD CODE:

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

R0 (29-November 2001)