

CMXD3003TO
SURFACE MOUNT
TRIPLE ISOLATED OPPOSING
LOW LEAKAGE
SILICON SWITCHING DIODES



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMXD3003TO consists of three (3) Isolated Low Leakage Silicon Switching Diodes arranged in an alternating configuration in a SUPERmini SOT-26 surface mount package, and is designed for low leakage switching applications. This device can be configured as a 540V switching diode. See optional mounting pad configuration.

MARKING CODE: C03TO

APPLICATIONS:

- Voltage Multiplier
- Steering Diode Array
- General Purpose Switching

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

Continuous 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		UNITS
V_R	180	V
I_O	200	mA
I_F	600	mA
I_{FRM}	700	mA
I_{FSM}	2.0	A
I_{FSM}	1.0	A
P_D	350	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	357	$^\circ\text{C/W}$

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

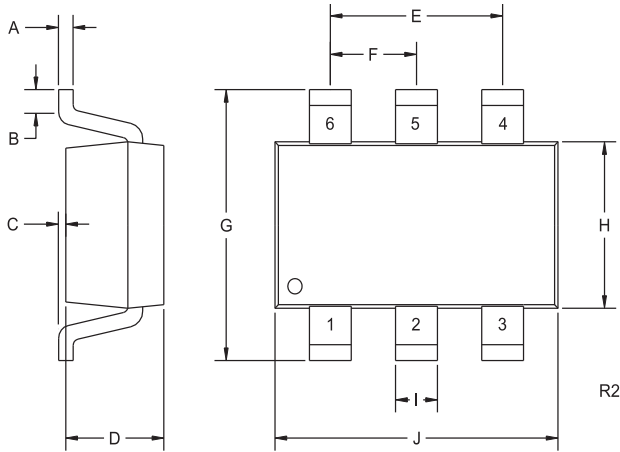
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=125\text{V}$		1.0	nA
I_R	$V_R=125\text{V}, T_A=150^\circ\text{C}$		3.0	μA
I_R	$V_R=180\text{V}$		10	nA
I_R	$V_R=180\text{V}, T_A=150^\circ\text{C}$		5.0	μA
BV_R	$I_R=5.0\mu\text{A}$	200		V
V_F	$I_F=1.0\text{mA}$	0.62	0.72	V
V_F	$I_F=10\text{mA}$	0.72	0.83	V
V_F	$I_F=50\text{mA}$	0.80	0.89	V
V_F	$I_F=100\text{mA}$	0.83	0.93	V
V_F	$I_F=200\text{mA}$	0.87	1.10	V
V_F	$I_F=300\text{mA}$	0.90	1.15	V
C_T	$V_R=0, f=1.0\text{MHz}$		4.0	pF

R1 (26-July 2011)

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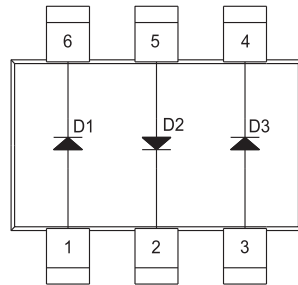
SOT 26 CASE - MECHANICAL OUTLINE



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

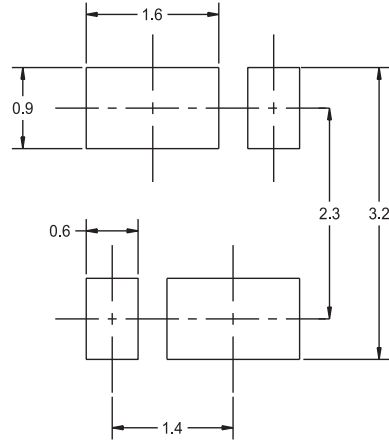


LEAD CODE:

- 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 540V Series Configuration
 (Dimensions in mm)



R0

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