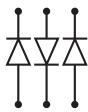


CMXD3003TO

SURFACE MOUNT  
TRIPLE ISOLATED OPPOSING  
LOW LEAKAGE  
SILICON SWITCHING DIODES

SUPERmini™



SOT-26 CASE

**Central**  
Semiconductor Corp.

[www.centralsemi.com](http://www.centralsemi.com)

**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<sub>A</sub>=25°C)**

	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	180	V
Average Forward Current	I <sub>O</sub>	200	mA
Continuous Forward Current	I <sub>F</sub>	600	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	700	mA
Peak Forward Surge Current, tp=1.0μs	I <sub>FSM</sub>	2.0	A
Peak Forward Surge Current, tp=1.0s	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	UNITS
I <sub>R</sub>	V <sub>R</sub> =125V		1.0	nA
I <sub>R</sub>	V <sub>R</sub> =125V, T <sub>A</sub> =150°C		3.0	μA
I <sub>R</sub>	V <sub>R</sub> =180V		10	nA
I <sub>R</sub>	V <sub>R</sub> =180V, T <sub>A</sub> =150°C		5.0	μA
BV <sub>R</sub>	I <sub>R</sub> =5.0μA	200		V
V <sub>F</sub>	I <sub>F</sub> =1.0mA	0.62	0.72	V
V <sub>F</sub>	I <sub>F</sub> =10mA	0.72	0.83	V
V <sub>F</sub>	I <sub>F</sub> =50mA	0.80	0.89	V
V <sub>F</sub>	I <sub>F</sub> =100mA	0.83	0.93	V
V <sub>F</sub>	I <sub>F</sub> =200mA	0.87	1.10	V
V <sub>F</sub>	I <sub>F</sub> =300mA	0.90	1.15	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0MHz		4.0	pF

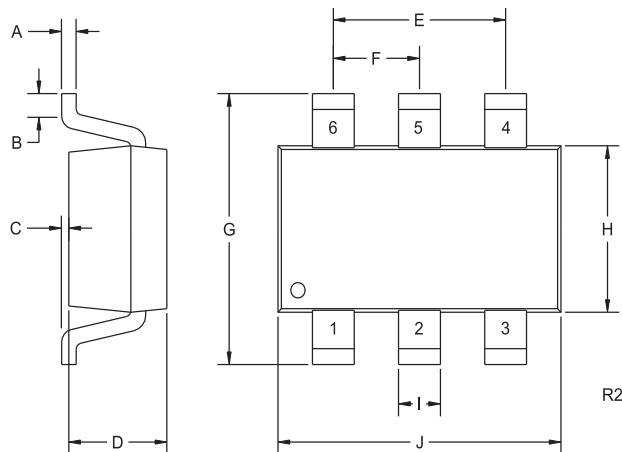
R1 (26-July 2011)

CMXD3003TO

SURFACE MOUNT  
TRIPLE ISOLATED OPPOSING  
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SILICON SWITCHING DIODES

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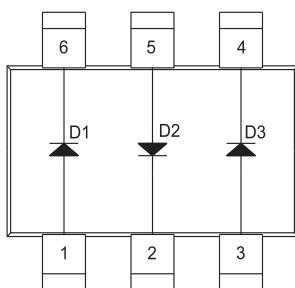
**SOT 26 CASE - MECHANICAL OUTLINE**



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**

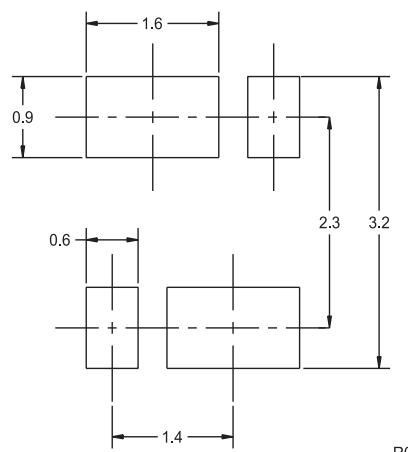


**LEAD CODE:**

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

**MARKING CODE: C03TO**

**OPTIONAL MOUNTING PADS  
For 540V Series Configuration  
(Dimensions in mm)**



R0

R1 (26-July 2011)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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