

**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	$^\circ\text{C}$
$\theta_{JA}$	357	$^\circ\text{C/W}$

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

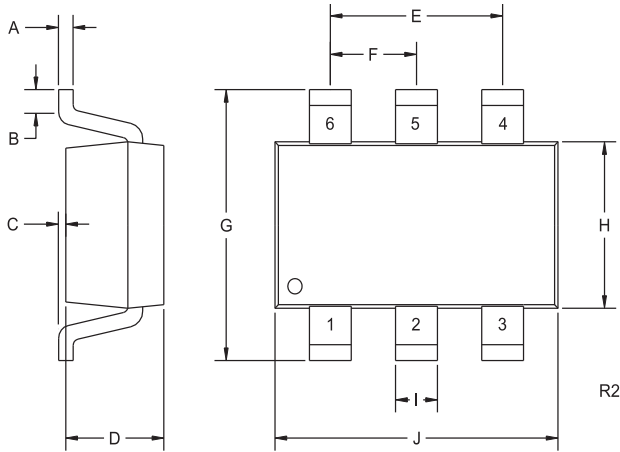
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=125\text{V}$		1.0	nA
$I_R$	$V_R=125\text{V}, T_A=150^\circ\text{C}$		3.0	$\mu\text{A}$
$I_R$	$V_R=180\text{V}$		10	nA
$I_R$	$V_R=180\text{V}, T_A=150^\circ\text{C}$		5.0	$\mu\text{A}$
$BV_R$	$I_R=5.0\mu\text{A}$	200		V
$V_F$	$I_F=1.0\text{mA}$	0.62	0.72	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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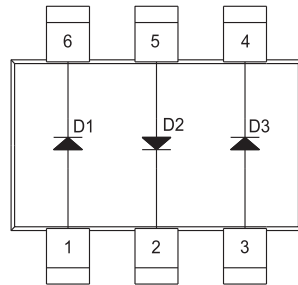
**SOT 26 CASE - MECHANICAL OUTLINE**



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**

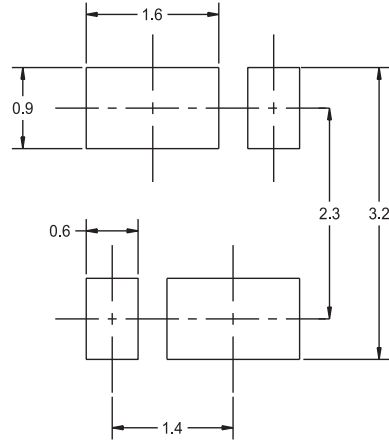


**LEAD CODE:**

- 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

R1 (26-July 2011)

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- Custom product packing

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