



**CMLD3003DO
CMLD3003DOG**

**SURFACE MOUNT PICOmini™
DUAL, ISOLATED, OPPOSING
LOW LEAKAGE SILICON
SWITCHING DIODES**



Central™

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLD3003DO and CMLD3003DOG types contain Two (2) Isolated Opposing Configuration, Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a PICOmini™ surface mount package. These devices are designed for switching applications requiring extremely low leakage.

MARKING CODES:

**CMLD3003DO: C30
CMLD3003DOG: 3CG**

• *The CMLD3003DOG is Halogen Free by design*

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Continuous Reverse Voltage	V _R	180	V
Average Rectified Current	I _O	200	mA
Continuous Forward Current	I _F	600	mA
Peak Repetitive Forward Current	I _{FRM}	700	mA
Forward Surge Current, tp=1 μsec.	I _{FSM}	2.0	A
Forward Surge Current, tp=1 sec.	I _{FSM}	1.0	A
Power Dissipation	P _D	250	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	θ _{JA}	500	°C/W

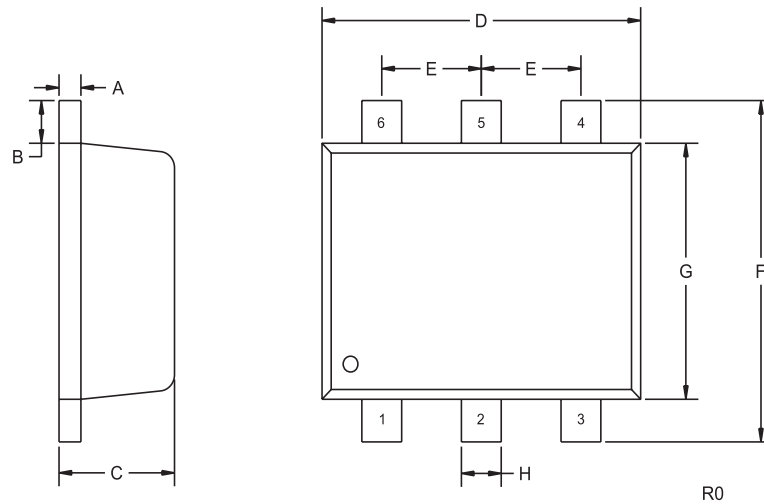
ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =125V		1.0	nA
I _R	V _R =125V, T _A =150°C		3.0	μA
I _R	V _R =180V		10	nA
I _R	V _R =180V, T _A =150°C		5.0	μA
BV _R	I _R =5.0μA	200		V
V _F	I _F =1.0mA	0.62	0.72	V
V _F	I _F =10mA	0.72	0.83	V
V _F	I _F =50mA	0.80	0.89	V
V _F	I _F =100mA	0.83	0.93	V
V _F	I _F =200mA	0.87	1.10	V
V _F	I _F =300mA	0.90	1.15	V
C _T	V _R =0, f=1 MHz		4.0	pF

R1 (28-April 2008)

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SOT-563 CASE - MECHANICAL OUTLINE



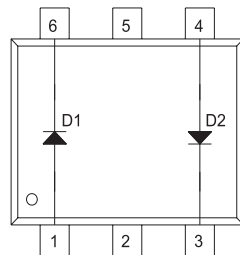
LEAD CODE:

- 1) ANODE D1
- 2) NC
- 3) CATHODE D2
- 4) ANODE D2
- 5) NC
- 6) CATHODE D1

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.10	0.18
B	0.008		0.20	
C	0.022	0.024	0.56	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.061	0.067	1.55	1.70
G	0.047		1.20	
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R0)

PIN CONFIGURATION



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