

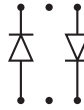
CMLD3003DO
CMLD3003DOG

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



www.centrasemi.com

PICOmini™



SOT-563 CASE

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)

Continuous Reverse Voltage
Average Rectified Current
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, tp=1.0µs
Peak Forward Surge Current, tp=1.0s
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R 180
I_O 200
I_F 600
I_{FRM} 700
I_{FSM} 2.0
I_{FSM} 1.0
P_D 250
T_J, T_{stg} -65 to +150
θ_{JA} 500

UNITS

V
mA
mA
mA
A
A
mW
°C
°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=1.0MHz		4.0	pF

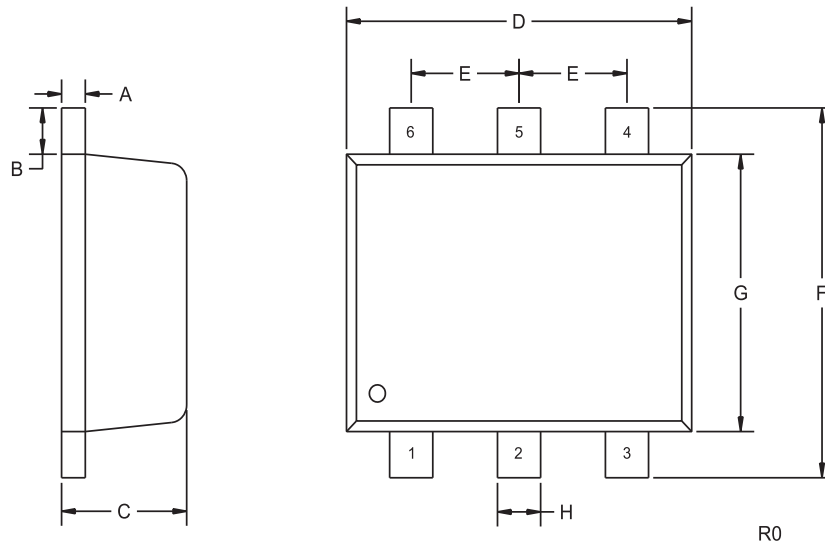
R2 (18-January 2010)

CMLD3003DO
CMLD3003DOG

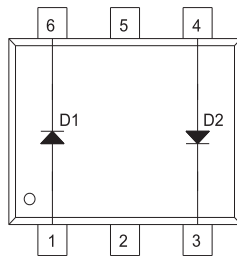
**SURFACE MOUNT
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SWITCHING DIODES**



SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

SYMBOL	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)

MARKING CODES:

CMLD3003DO: C30
CMLD3003DOG: 3CG

R2 (18-January 2010)