

CMLD4448DO
CMLD4448DOG

SURFACE MOUNT
DUAL, ISOLATED, OPPOSING
HIGH SPEED SILICON
SWITCHING DIODES

PICOmini™



SOT-563 CASE

Central
Semiconductor Corp.

www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLD4448DO and CMLD4448DOG each 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 high speed switching applications.

MARKING CODES:

CMLD4448DO: C40

CMLD4448DOG: 4CG

• The CMLD4448DOG is **Halogen Free** by design

MAXIMUM RATINGS: (T_A=25°C)

Peak Repetitive Reverse Voltage
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_{RRM} 120
I_F 250
I_{FRM} 500
I_{FSM} 4.0
I_{FSM} 1.0
P_D 250
T_J, T_{stg} -65 to +150
Θ_{JA} 500

UNITS

V
mA
mA
A
A
mW
°C
°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =50V			300	nA
I _R	V _R =50V, T _A =125°C			100	µA
I _R	V _R =100V			500	nA
BV _R	I _R =100µA	120	150		V
V _F	I _F =1.0mA	0.55	0.59	0.65	V
V _F	I _F =10mA	0.67	0.72	0.77	V
V _F	I _F =100mA	0.85	0.91	1.0	V
C _T	V _R =0, f=1.0MHz			1.5	pF
t _{rr}	I _R =I _F =10mA, R _L =100Ω, Rec. to 1.0mA		2.0	4.0	ns

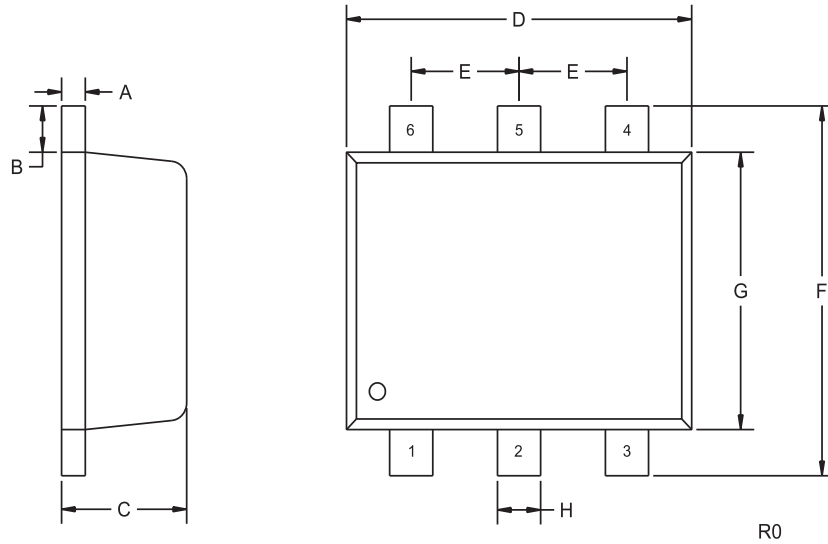
R4 (18-January 2010)

CMLD4448DO
CMLD4448DOG

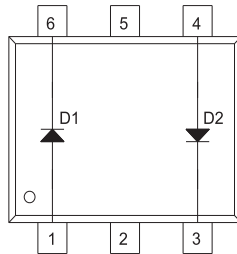
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SOT-563 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

DIMENSIONS				
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)

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CMLD4448DO: C40
CMLD4448DOG: 4CG

R4 (18-January 2010)