

CMLD4448DO  
CMLD4448DOG

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



[www.centrasemi.com](http://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 an SOT-563 surface mount package. These devices are designed for high speed switching applications.

**MARKING CODES:**

**CMLD4448DO: C40**

**CMLD4448DOG: 4CG**



**SOT-563 CASE**

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

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Peak Repetitive Reverse Voltage	$V_{RRM}$	120	V
Continuous Forward Current	$I_F$	250	mA
Peak Repetitive Forward Current	$I_{FRM}$	500	mA
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$	$I_{FSM}$	4.0	A
Peak Forward Surge Current, $t_p=1.0\text{s}$	$I_{FSM}$	1.0	A
Power Dissipation	$P_D$	250	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	500	$^\circ\text{C/W}$

**SYMBOL**

**UNITS**

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

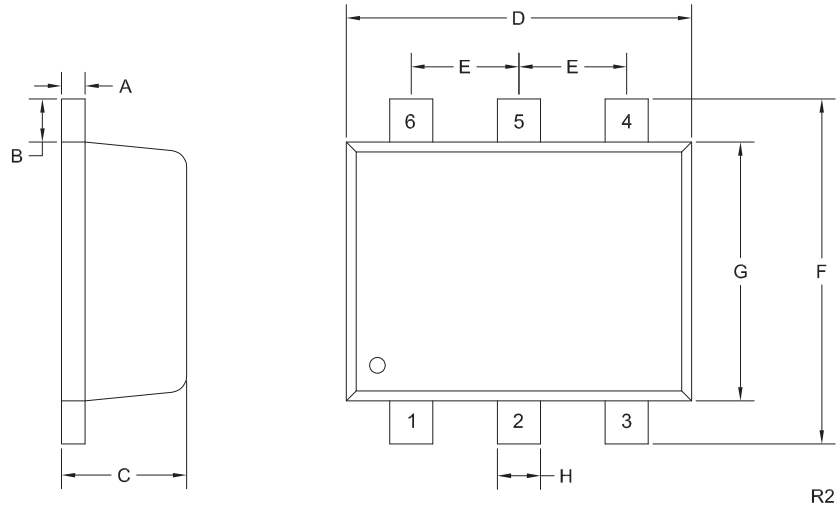
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=50\text{V}$			300	nA
$I_R$	$V_R=50\text{V}, T_A=125^\circ\text{C}$			100	$\mu\text{A}$
$I_R$	$V_R=100\text{V}$			500	nA
$BV_R$	$I_R=100\mu\text{A}$	120	150		V
$V_F$	$I_F=1.0\text{mA}$	0.55	0.59	0.65	V
$V_F$	$I_F=10\text{mA}$	0.67	0.72	0.77	V
$V_F$	$I_F=100\text{mA}$	0.85	0.91	1.0	V
$C_J$	$V_R=0, f=1.0\text{MHz}$			1.5	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		2.0	4.0	ns

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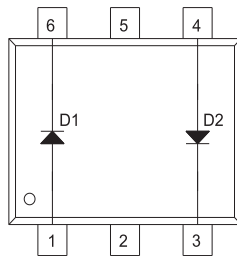
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**SOT-563 CASE - MECHANICAL OUTLINE**



**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	0.0027	0.007	0.07	0.18
B	0.008		0.20	
C	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R2)

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**CMLD4448DO: C40**  
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R6 (15-June 2015)

CMLD4448DO  
CMLD4448DOG

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#### **SERVICES**

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
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- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R6 (15-June 2015)

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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