

CMLD2004G CMLD2004A
CMLD2004C CMLD2004S
CMLD2004DO

**SURFACE MOUNT SILICON
DUAL, HIGH VOLTAGE
SWITCHING DIODES**



SOT-563 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMLD2004G series contains two (2) silicon high voltage switching diodes, manufactured by the epitaxial planar process, epoxy molded in an SOT-563 surface mount package, designed for applications requiring high voltage capability.

The following configurations are available:

CMLD2004G	DUAL, ISOLATED	MARKING CODE: DG
CMLD2004A	DUAL, COMMON ANODE	MARKING CODE: 04A or 4A
CMLD2004C	DUAL, COMMON CATHODE	MARKING CODE: 04C
CMLD2004S	DUAL, IN SERIES	MARKING CODE: 04S
CMLD2004DO	DUAL, ISOLATED OPPOSING	MARKING CODE: 04O

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

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Peak Repetitive Reverse Current	I_O	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	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	θ_{JA}	500	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=240\text{V}$		100	nA
I_R	$V_R=240\text{V}, T_A=150^{\circ}\text{C}$		100	μA
BV_R	$I_R=100\mu\text{A}$	300		V
V_F	$I_F=100\text{mA}$		1.0	V
C_J	$V_R=0, f=1.0\text{MHz}$		5.0	pF
t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=3.0\text{mA}, R_L=100\Omega$		50	ns

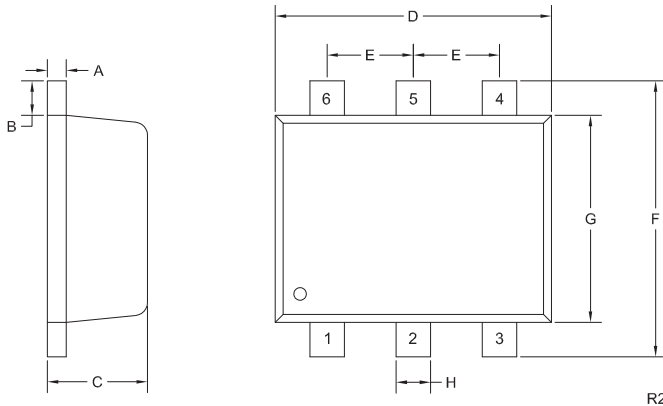
R8 (21-March 2016)

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SOT-563 CASE - MECHANICAL OUTLINE



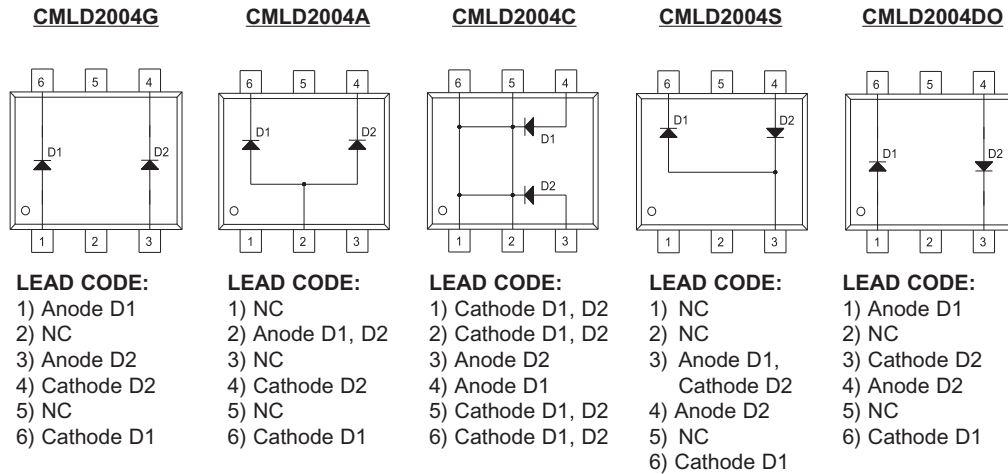
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.0027	0.007	0.07	0.18
B	0.008		0.20	
C	0.017	0.024	0.45	0.60
D	0.059	0.067	1.50	1.70
E	0.020		0.50	
F	0.059	0.067	1.50	1.70
G	0.043	0.051	1.10	1.30
H	0.006	0.012	0.15	0.30

SOT-563 (REV: R2)

MARKING CODES:

CMLD2004G: DG
CMLD2004A: 04A or 4A
CMLD2004C: 04C
CMLD2004S: 04S
CMLD2004DO: 04O

PIN CONFIGURATIONS



R8 (21-March 2016)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

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www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms



<http://www.centrasemi.com>

Product End of Life Notification

PDN ID:	PDN01063 Rev:001
Notification Date:	3/03/17
Last Buy Date:	N/A
Last Shipment Date	N/A

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. We are unable to accept any further orders for these products unless we have available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.



<http://www.centrasemi.com>

Product End of Life Notification

PDN ID:	PDN01063 Rev:001
Notification Date:	3/03/17
Last Buy Date:	N/A
Last Shipment Date	N/A

Summary: All devices manufactured in the SOT-563 package, using the Option 2 Lead Frame, are discontinued and now classified as End of Life (EOL). Rev001 issued to include BK devices previously excluded in error.

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

<u>Central Part Number</u>	<u>Replacement</u>
CMLD2004G BK	N/A
CMLD2004G TR	N/A
CMLD4448 BK	N/A
CMLD4448 TR	N/A
CMLD6001 BK	N/A
CMLD6001 TR	N/A
CMLD6263 BK	N/A
CMLD6263 TR	N/A
CMLD6263S BK	N/A
CMLD6263S TR	N/A
CMLSH-4 BK	N/A
CMLSH-4 TR	N/A
CMLZDA3V3 BK	N/A
CMLZDA3V3 TR	N/A
CMLZDA6V2 BK	N/A
CMLZDA6V2 TR	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centrasemi.com.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.