CMLD2004G CMLD2004A CMLD2004C CMLD2004S CMLD2004DO

SURFACE MOUNT SILICON DUAL, HIGH VOLTAGE SWITCHING DIODES



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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
CMLD2004S DUAL, IN SERIES MARKING CODE: 04S
CMLD2004DO DUAL, ISOLATED OPPOSING MARKING CODE: 04O

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	V_{R}	240	V
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
Peak Repetitive Reverse Current	IO	200	mA
Continuous Forward Current	Ι _F	225	mA
Peak Repetitive Forward Current	IFRM	625	mA
Peak Forward Surge Current, tp=1.0µs	I _{FSM}	4.0	Α
Peak Forward Surge Current, tp=1.0s	I _{FSM}	1.0	Α
Power Dissipation	P_{D}	250	mW
Operating and Storage Junction Temperature	Т _Ј , Т _{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	500	°C/W

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

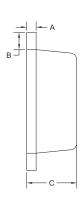
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{R}	V _R =240V		100	nA
I_{R}	V _R =240V, T _A =150°C		100	μA
BV_R	I _R =100μA	300		V
V_{F}	I _F =100mA		1.0	V
CJ	$V_R=0$, $f=1.0MHz$		5.0	pF
t _{rr}	$I_F = I_R = 30 \text{mA}, I_{rr} = 3.0 \text{mA}, R_L = 100 \Omega$		50	ns

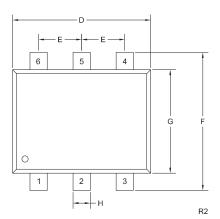
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SURFACE MOUNT SILICON **DUAL, HIGH VOLTAGE SWITCHING DIODES**



SOT-563 CASE - MECHANICAL OUTLINE





DIMENSIONS					
	INCHES		MILLIMETERS		
SYMBOL	MIN	MAX	MIN	MAX	
Α	0.0027	0.007	0.07	0.18	
В	0.008		0.20		
С	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	
Н	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: 040

PIN CONFIGURATIONS

CMLD2004G

2

LEAD CODE:

1) Anode D1

3) Anode D2

4) Cathode D2

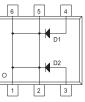
6) Cathode D1

2) NC

5) NC

CMLD2004A

CMLD2004C



- 1) Cathode D1, D2
- 3) Anode D2
- 4) Cathode D2

2) Anode D1, D2

2

LEAD CODE:

3) NC 5) NC

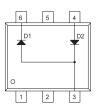
1) NC

6) Cathode D1

LEAD CODE:

- 2) Cathode D1, D2
- 4) Anode D1
- 5) Cathode D1, D2
- 6) Cathode D1, D2

CMLD2004S



LEAD CODE:

3) Anode D1,

4) Anode D2

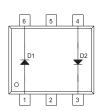
Cathode D2

1) NC

2) NC

5) NC 6) Cathode D1

CMLD2004DO



LEAD CODE:

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

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 guick 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

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Product End of Life Notification

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Notification Date:	3/03/17
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Last Shipment Date	N/A

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Sincerely,

Central Semiconductor Corp.

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CCC785 REV 002