# SURFACE MOUNT SILICON DUAL OPPOSING HIGH VOLTAGE SCHOTTKY DIODE





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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMLD6263DO incorporates two galvanically isolated, high voltage, low VF silicon diodes with an opposing Anode/Cathode configuration, in a space saving SOT-563 surface mount package. These diodes are designed for fast switching applications requiring a low forward voltage drop.

**MARKING CODE: 630** 

#### **FEATURES:**

- Dual Opposing (DO) Schottky Diodes
- High Voltage (70V)

- · Low Forward Voltage
- · Galvanically Isolated

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	70	V
Continuous Forward Current	l <sub>F</sub>	15	mA
Peak Forward Surge Current, tp=1.0s	I <sub>FSM</sub>	50	mA
Power Dissipation	$P_{D}$	250	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	500	°C/W

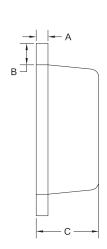
# **ELECTRICAL CHARACTERISTICS PER DIODE:** (TA=25°C unless otherwise noted)

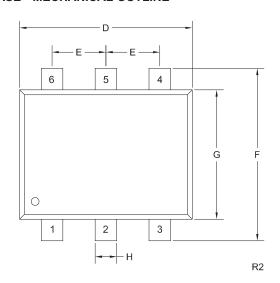
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	V <sub>R</sub> =50V		10	200	nA
$BV_R$	I <sub>R</sub> =10μA	70			V
$V_{F}$	I <sub>F</sub> =1.0mA		395	410	mV
CJ	V <sub>R</sub> =0, f=1.0MHz			2.0	pF
t <sub>rr</sub>	$I_R = I_F = 10 \text{mA}, I_{rr} = 1.0 \text{mA}, R_I = 100 \Omega$			5.0	ns

## SURFACE MOUNT SILICON DUAL OPPOSING HIGH VOLTAGE SCHOTTKY DIODE

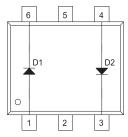


# **SOT-563 CASE - MECHANICAL OUTLINE**





## **PIN CONFIGURATION**



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)							

## LEAD CODE:

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

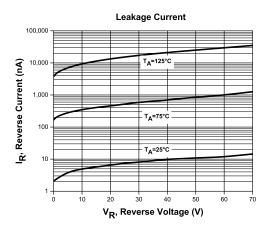
**MARKING CODE: 630** 

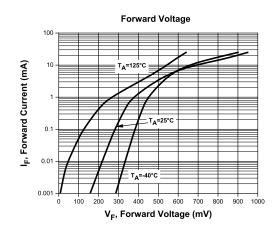
R6 (11-December 2015)

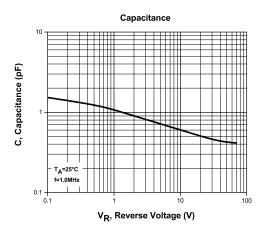
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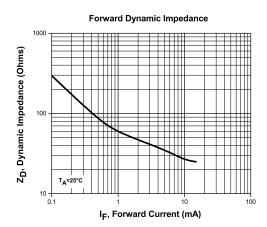


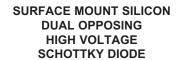
## TYPICAL ELECTRICAL CHARACTERISTICS





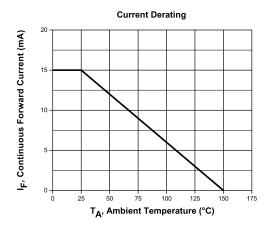


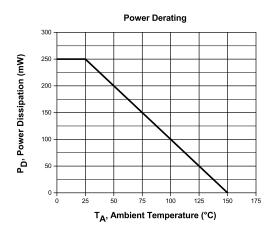






## TYPICAL ELECTRICAL CHARACTERISTICS





#### **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 (2<sup>nd</sup> 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

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

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