# SURFACE MOUNT SILICON DUAL, ISOLATED, OPPOSING SCHOTTKY DIODE



#### **APPLICATIONS:**

- DC-DC Converters
- Voltage Clamping
- Protection Circuits
- Battery Powered Portable Devices

<b>Central</b>
Semiconductor Corp.

www.centralsemi.com

# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMRD6263DO are Dual, Isolated, Opposing highly reliable Schottky Diodes designed for applications where very small size and operational efficiency are prime requirements.

MARKING CODE: CX

#### **FEATURES:**

- Current (I<sub>F</sub>=15mA)
- V<sub>RRM</sub>=70V
- Low Forward Voltage Drop (V<sub>F</sub>=0.395V TYP@1.0mA)
- Low Reverse Current (98nA TYP@50V)
- Extremely Fast Switching (5.0ns MAX)

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	70	V
Continuous Forward Current	Ι <sub>F</sub>	15	mA
Peak Forward Surge Current, tp=1.0s	<sup>I</sup> FSM	50	mA
Power Dissipation	$P_{D}$	125	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{JA}$	1000	°C/W

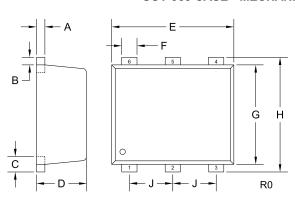
### **ELECTRICAL CHARACTERISTICS PER DIODE**: (T<sub>A</sub>=25°C unless otherwise noted)

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		0.395	0.41	V
CJ	$V_R=0$ , f=1.0MHz			2.0	pF
t <sub>rr</sub>	$I_F = I_R = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ $\Omega$			5.0	ns

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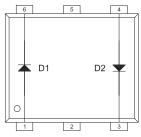
# **SOT-963 CASE - MECHANICAL OUTLINE**



DIMENSIONS							
SYMBOL	INCHES		MILLIMETERS				
	MIN	MAX	MIN	MAX			
Α	0.002	0.006	0.050	0.150			
В	0.002	0.006	0.050	0.150			
С	0.005	0.007	0.125	0.175			
D	0.016	0.020	0.400	0.500			
Е	0.037	0.041	0.950	1.050			
F	0.004	0.008	0.100	0.200			
G	0.030	0.033	0.750	0.850			
Н	0.037	0.041	0.950	1.050			
J	0.014		0.3	350			
COT 000 (DEV) DOV							

SOT-963 (REV: R0)

#### **PIN CONFIGURATION**

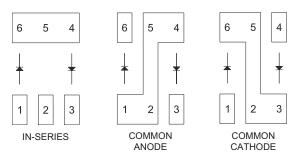


# LEAD CODE:

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

MARKING CODE: CX

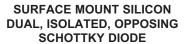
### SUGGESTED MOUNTING PAD CONFIGURATIONS



# Note:

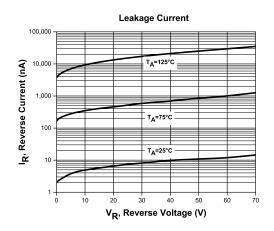
Two devices easily configurable as a bridge rectifier.

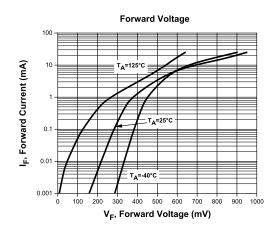
R2 (11-December 2015)

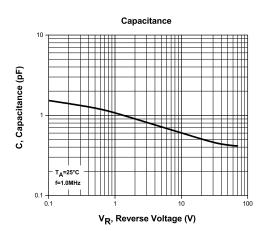


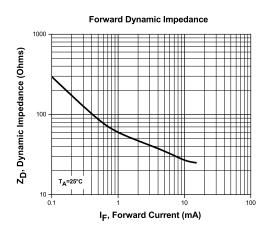


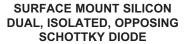
# TYPICAL ELECTRICAL CHARACTERISTICS





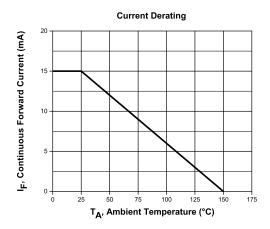


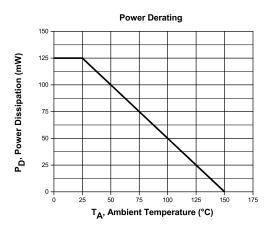






# TYPICAL ELECTRICAL CHARACTERISTICS





### **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**

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