### SURFACE MOUNT SILICON DUAL, ISOLATED, OPPOSING SCHOTTKY DIODE



# **APPLICATIONS:**

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



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### **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

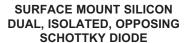
### **FEATURES:**

- 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	ΙF	15	mA
Peak Forward Surge Current, tp=1.0s	I <sub>FSM</sub>	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	Θ.ΙΑ	1000	°C/W

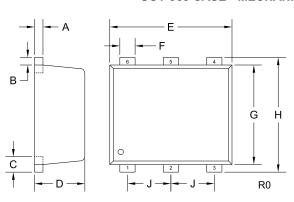
# **ELECTRICAL CHARACTERISTICS PER DIODE:** (TA=25°C unless otherwise noted)

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		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





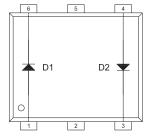
### **SOT-963 CASE - MECHANICAL OUTLINE**



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		0.350			

SOT-963 (REV: R0)

### **PIN CONFIGURATION**

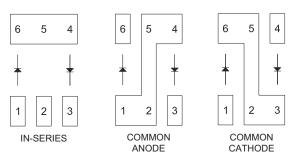


# **LEAD CODE:**

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

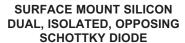
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### SUGGESTED MOUNTING PAD CONFIGURATIONS



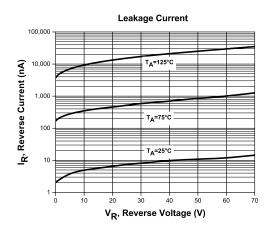
Two devices easily configurable as a bridge rectifier.

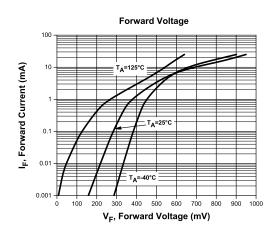
R2 (11-December 2015)

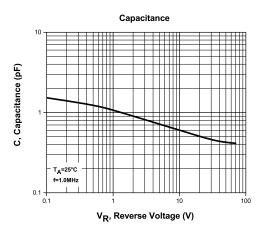


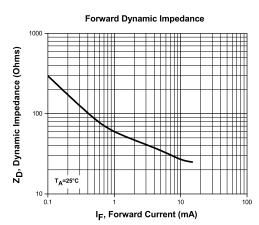


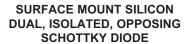
# TYPICAL ELECTRICAL CHARACTERISTICS





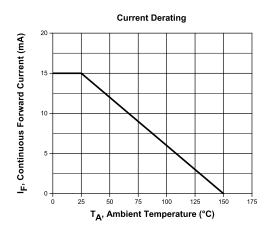


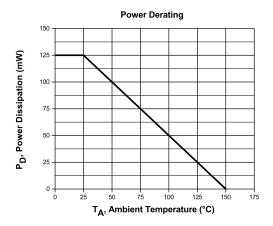






# TYPICAL ELECTRICAL CHARACTERISTICS





# **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

### **CONTACT US**

# Corporate Headquarters & Customer Support Team

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