SURFACE MOUNT SILICON DUAL, ISOLATED, OPPOSING SCHOTTKY DIODE



APPLICATIONS:

- DC-DC converters
- Voltage clamping
- Protection circuits
- · Battery charging circuits



www.centralsemi.com

DESCRIPTION: The CENTRAL SEMICONDUCTOR CMRSH-4DO are dual, isolated, opposing high quality Schottky diodes designed for applications where very small size and operational efficiency are prime requirements.

MARKING CODE: CV

FEATURES:

- Current (I_O=200mA)
- Low forward voltage drop (V_F=0.35V TYP @ 1.0mA)
- Low reverse current (25nA TYP @ 30V)
- Extremely fast switching (5.0ns MAX)
- Small 1.0 x 1.0 x 0.5mm SOT-963 surface mount package
- Versatile multi-configurable device

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Average Forward Current	IO	200	mA
Peak Forward Surge Current, tp=8.3ms	I _{FSM}	600	mA
Power Dissipation	P_{D}	125	mW
Operating Junction Temperature	T_J	-65 to +125	°C
Storage Temperature	T _{stg}	-65 to +150	°C
Thermal Resistance	Θιδ	800	°C/W

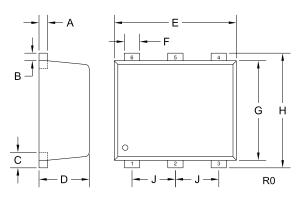
ELECTRICAL CHARACTERISTICS PER DIODE: (TA=25°C unless otherwise noted)

SYMBOL I _R	TEST CONDITIONS V _R =30V	MIN	TYP 25	MAX 200	UNITS nA
BV _R	I _R =10μA	40	20	200	V
V _F	I _F =1.0mA		0.35	0.38	V
V_{F}	I _F =15mA		0.55	0.65	V
V_{F}	I _F =40mA		0.77	1.00	V
CJ	$V_R=0$, f=1.0MHz			5.0	pF
V _F I _F =40mA				5.0	ns

SURFACE MOUNT SILICON DUAL, ISOLATED, OPPOSING SCHOTTKY DIODE



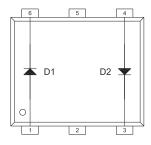
SOT-963 CASE - MECHANICAL OUTLINE



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		
E	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			
00T 000 (DEV D0)						

SOT-963 (REV: R0)

PIN CONFIGURATION

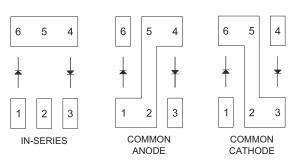


LEAD CODE:

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

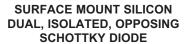
MARKING CODE: CV

SUGGESTED MOUNTING PAD CONFIGURATIONS



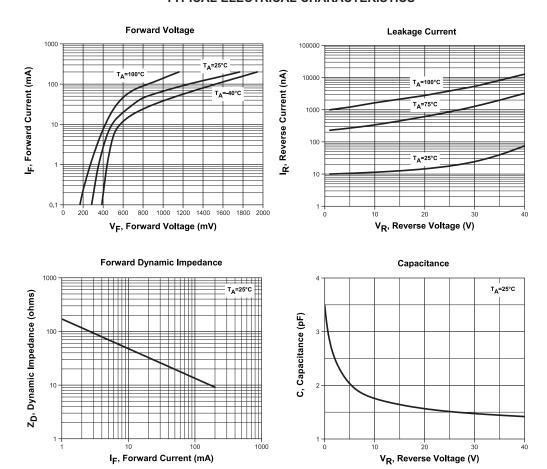
Note:

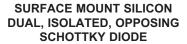
Two devices easily configurable as a bridge rectifier.





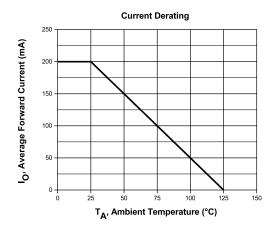
TYPICAL ELECTRICAL CHARACTERISTICS

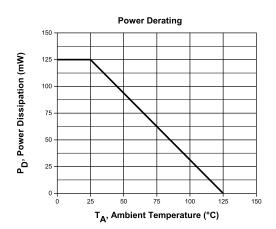






TYPICAL ELECTRICAL CHARACTERISTICS





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 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

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

Worldwide Distributors:

www.centralsemi.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.centralsemi.com/terms

www.centralsemi.com (001)