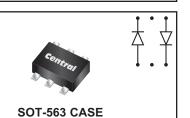
SURFACE MOUNT SILICON DUAL, ISOLATED OPPOSING LOW  $V_{\mbox{\scriptsize F}}$  SCHOTTKY DIODE





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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMLSH05-4DO consists of two (2) individual electrically isolated 40 Volt Schottky diodes with opposing polarity and packaged in a space saving SOT-563 surface mount case. This device has been designed for applications requiring a low forward voltage drop.

**MARKING CODE: CO4** 

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	Ι <sub>Ε</sub>	500	mA
Peak Repetitive Forward Current, tp≤1.0ms	I <sub>FRM</sub>	3.5	Α
Peak Forward Surge Current, tp=8.0ms	I <sub>FSM</sub>	10	Α
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	Θ.ΙΑ	500	°C/W

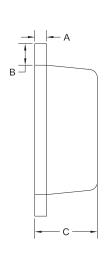
# **ELECTRICAL CHARACTERISTICS PER DIODE:** (T<sub>A</sub>=25°C unless otherwise noted)

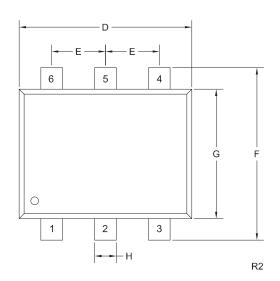
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
IR	V <sub>R</sub> =10V		30	μA
I <sub>R</sub>	V <sub>R</sub> =30V		100	μΑ
$BV_R$	I <sub>R</sub> =500μA	40		V
$V_{F}$	I <sub>F</sub> =100μA		0.13	V
$V_{F}$	I <sub>F</sub> =1.0mA		0.21	V
$V_{F}$	I <sub>F</sub> =10mA		0.27	V
$V_{F}$	I <sub>F</sub> =100mA		0.35	V
$V_{F}$	I <sub>F</sub> =500mA		0.47	V
C.I	V <sub>R</sub> =1.0V, f=1.0MHz		50	pF

# SURFACE MOUNT SILICON **DUAL, ISOLATED OPPOSING** LOW V<sub>F</sub> SCHOTTKY DIODE

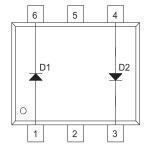


# **SOT-563 CASE - MECHANICAL OUTLINE**





### **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

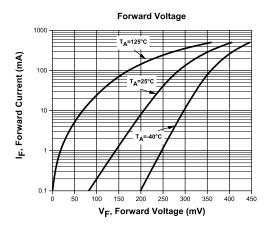
MARKING CODE: CO4

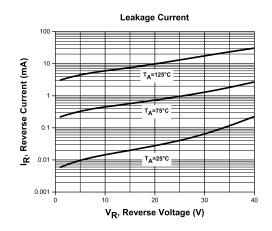
R6 (8-January 2018)

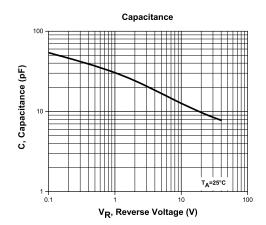
SURFACE MOUNT SILICON DUAL, ISOLATED OPPOSING LOW  $V_{\rm F}$  SCHOTTKY DIODE

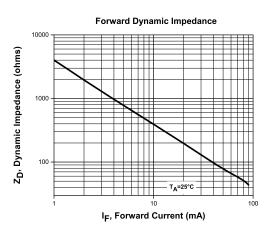


## TYPICAL ELECTRICAL CHARACTERISTICS





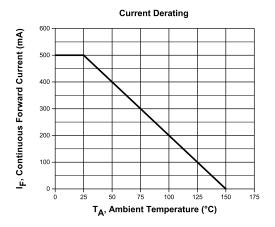


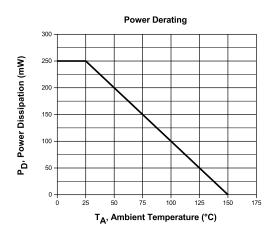






## TYPICAL ELECTRICAL CHARACTERISTICS





### **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 (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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