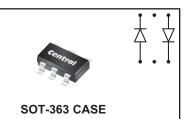
# SURFACE MOUNT SILICON DUAL, OPPOSING SCHOTTKY DIODE





www.centralsemi.com

# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKSH-3DO incorporates two (2) galvanically isolated, low  $V_F$  silicon diodes with an opposing Anode/Cathode configuration, in a space saving surface mount package, designed for fast switching applications requiring a low forward voltage drop.

**MARKING CODE: KDO** 

#### **FEATURES:**

- Dual Opposing (DO) Schottky Diodes
- Small SOT-363 Package

- · Galvanically Isolated
- Low Forward Voltage (0.51V TYP @ 100mA)

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	I <sub>F</sub>	100	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	ΘιΛ	500	°C/W

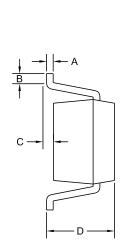
ELECTRICAL CHARACTERISTICS PER DIODE: (T<sub>A</sub>=25°C unless otherwise noted)

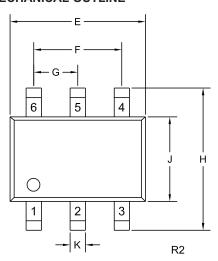
SYMBOL I <sub>R</sub>	V <sub>R</sub> =25V	MIN	TYP	<b>MAX</b> 500	UNITS nA
$I_{R}$	V <sub>R</sub> =25V, T <sub>A</sub> =100°C			100	μΑ
$BV_R$	I <sub>R</sub> =100μA	30			V
$V_{F}$	I <sub>F</sub> =2.0mA			0.33	V
$V_{F}$	I <sub>F</sub> =15mA			0.45	V
$V_{F}$	I <sub>F</sub> =100mA		0.51	1.00	V
CJ	V <sub>R</sub> =1.0V, f=1.0MHz		7.0		pF
t <sub>rr</sub>	$I_F = I_R = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ $\Omega$			5.0	ns

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

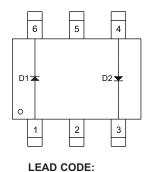


## **SOT-363 CASE - MECHANICAL OUTLINE**





## **PIN CONFIGURATION**



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.004	0.010	0.10	0.25			
В	0.005	-	0.12	-			
С	0.000	0.004	0.00	0.10			
D	0.031	0.043	0.80	1.10			
E	0.071	0.087	1.80	2.20			
F	0.051		1.30				
G	0.026		0.65				
Н	0.075	0.091	1.90	2.30			
J	0.043	0.055	1.10	1.40			
K	0.006	0.012	0.15	0.30			

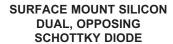
SOT-363 (REV: R2)

# 1) Anode D1

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

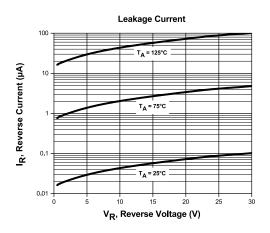
MARKING CODE: KDO

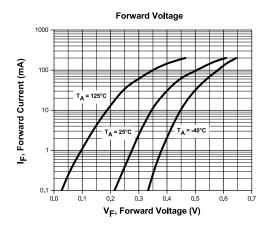
R5 (11-February 2016)

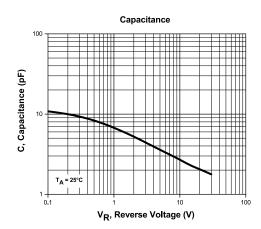


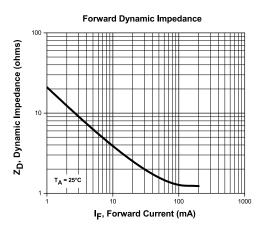


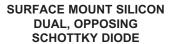
## TYPICAL ELECTRICAL CHARACTERISTICS





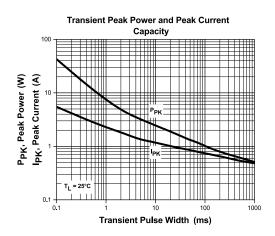


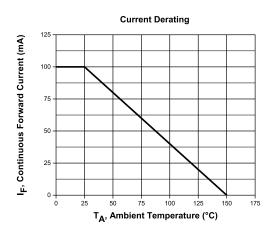


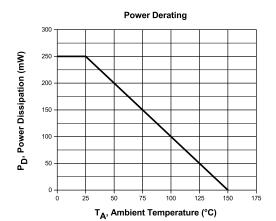




## TYPICAL ELECTRICAL CHARACTERISTICS







#### **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**

#### 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: <a href="https://www.centralsemi.com/wwreps">www.centralsemi.com/wwreps</a>

**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: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)