

CMKD3003DO

**SURFACE MOUNT  
DUAL, ISOLATED, OPPOSING  
LOW LEAKAGE SILICON  
SWITCHING DIODES**



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKD3003DO contains two (2) Isolated Opposing Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a ULTRAmimi™ surface mount package. These devices are designed for switching applications requiring extremely low leakage.

ULTRAmimi™



SOT-363 CASE

**MARKING CODE: C303**

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

Continuous Reverse Voltage
Average Rectified Current
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, tp=1.0µs
Peak Forward Surge Current, tp=1.0s
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

**SYMBOL**

V <sub>R</sub>	180
I <sub>O</sub>	200
I <sub>F</sub>	600
I <sub>FRM</sub>	700
I <sub>FSM</sub>	2.0
I <sub>FSM</sub>	1.0
P <sub>D</sub>	350
T <sub>J</sub> , T <sub>stg</sub>	-65 to +150
θ <sub>JA</sub>	357

**UNITS**

V
mA
mA
mA
A
A
mW
°C
°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =125V		1.0	nA
I <sub>R</sub>	V <sub>R</sub> =125V, T <sub>A</sub> =150°C		3.0	µA
I <sub>R</sub>	V <sub>R</sub> =180V		10	nA
I <sub>R</sub>	V <sub>R</sub> =180V, T <sub>A</sub> =150°C		5.0	µA
BV <sub>R</sub>	I <sub>R</sub> =5.0µA	200		V
V <sub>F</sub>	I <sub>F</sub> =1.0mA	0.62	0.72	V
V <sub>F</sub>	I <sub>F</sub> =10mA	0.72	0.83	V
V <sub>F</sub>	I <sub>F</sub> =50mA	0.80	0.89	V
V <sub>F</sub>	I <sub>F</sub> =100mA	0.83	0.93	V
V <sub>F</sub>	I <sub>F</sub> =200mA	0.87	1.10	V
V <sub>F</sub>	I <sub>F</sub> =300mA	0.90	1.15	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0MHz		4.0	pF

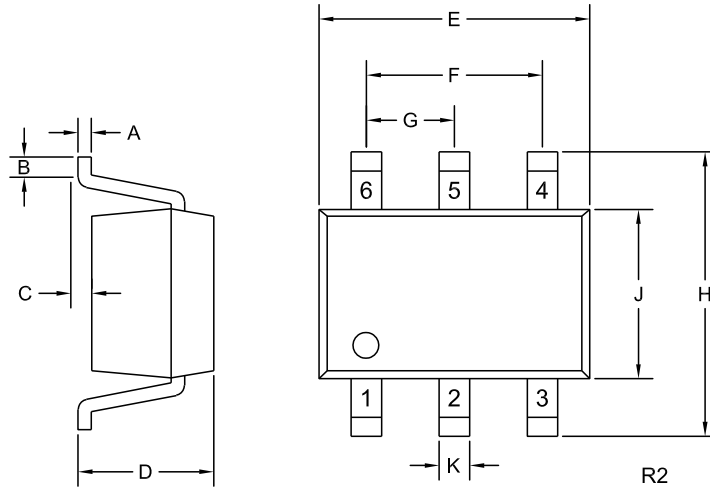
R0 (19-September 2011)

CMKD3003DO

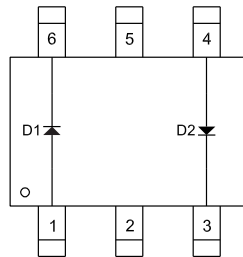
**SURFACE MOUNT  
DUAL, ISOLATED, OPPOSING  
LOW LEAKAGE SILICON  
SWITCHING DIODES**



**SOT-363 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



**LEAD CODE:**

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

**MARKING CODE: C303**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.010	0.10	0.25
B	0.005	-	0.12	-
C	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	
H	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)

R0 (19-September 2011)

## 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

#### 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.centrasemi.com](http://www.centrasemi.com)

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.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.centrasemi.com/terms](http://www.centrasemi.com/terms)