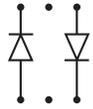


CMKD3003DO

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

ULTRAm<sup>TM</sup>ini



SOT-363 CASE

**Central**  
Semiconductor Corp.

[www.centrasemi.com](http://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 ULTRAm<sup>TM</sup>ini surface mount package. These devices are designed for switching applications requiring extremely low leakage.

**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, t<sub>p</sub>=1.0μs  
Peak Forward Surge Current, t<sub>p</sub>=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

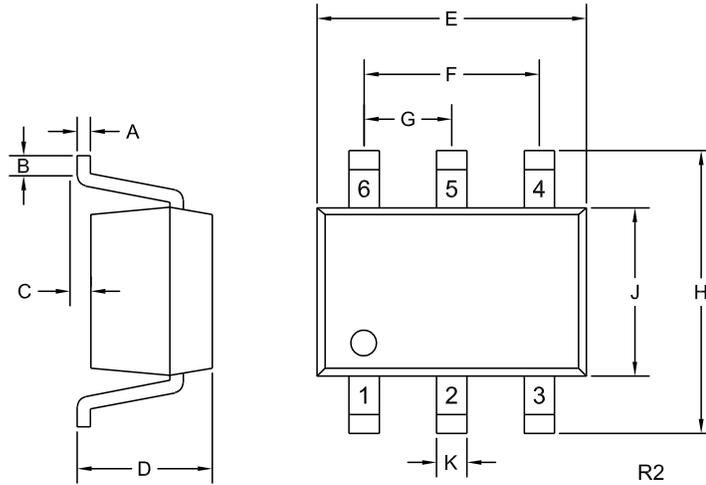
R0 (19-September 2011)

CMKD3003DO

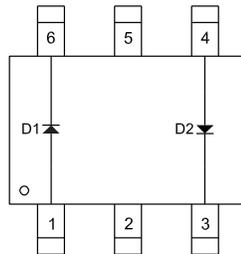
SURFACE MOUNT  
DUAL, ISOLATED, OPPOSING  
LOW LEAKAGE SILICON  
SWITCHING DIODES



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	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

---

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

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

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