

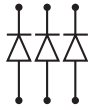
CMKD6001

**SURFACE MOUNT  
TRIPLE ISOLATED  
ULTRA LOW LEAKAGE  
SILICON SWITCHING DIODES**



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

ULTRAmulti™



SOT-363 CASE

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKD6001 type contains three (3) Isolated Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a ULTRAmulti™ surface mount package, designed for switching applications requiring extremely low leakage.

**MARKING CODE: K01**

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

|  |  |
|--|--|
| Continuous Reverse Voltage                 |  |
| Peak Repetitive Reverse Voltage            |  |
| 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>                    | 75          |
| V <sub>RRM</sub>                  | 100         |
| I <sub>F</sub>                    | 250         |
| I <sub>FRM</sub>                  | 500         |
| I <sub>FSM</sub>                  | 4.0         |
| I <sub>FSM</sub>                  | 1.0         |
| P <sub>D</sub>                    | 250         |
| T <sub>J</sub> , T <sub>stg</sub> | -65 to +150 |
| θ <sub>JA</sub>                   | 500         |

**UNITS**

|      |
|------|
| V    |
| V    |
| mA   |
| mA   |
| A    |
| A    |
| mW   |
| °C   |
| °C/W |

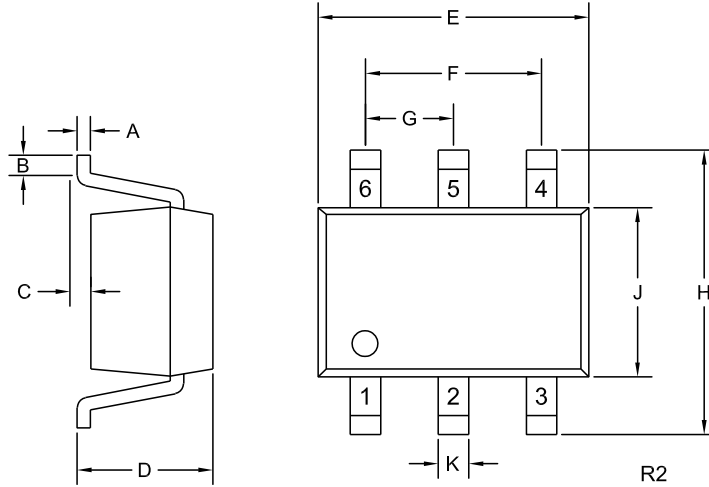
**ELECTRICAL CHARACTERISTICS PER DIODE:** (T<sub>A</sub>=25°C unless otherwise noted)

| SYMBOL          | TEST CONDITIONS  | MIN | MAX  | UNITS |
|-----------------|--|-----|------|-------|
| I <sub>R</sub>  | V <sub>R</sub> =75V  |     | 500  | pA    |
| BV <sub>R</sub> | I <sub>R</sub> =100µA  | 100 |      | V     |
| V <sub>F</sub>  | I <sub>F</sub> =1.0mA  |     | 0.85 | V     |
| V <sub>F</sub>  | I <sub>F</sub> =10mA   |     | 0.95 | V     |
| V <sub>F</sub>  | I <sub>F</sub> =100mA  |     | 1.1  | V     |
| C <sub>T</sub>  | V <sub>R</sub> =0, f=1.0MHz  |     | 2.0  | pF    |
| t <sub>rr</sub> | I <sub>R</sub> =I <sub>F</sub> =10mA, I <sub>rr</sub> =1.0mA, R <sub>L</sub> =100Ω |     | 3.0  | µs    |

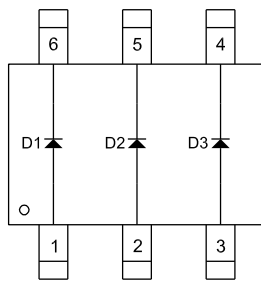
**CMKD6001**  
**SURFACE MOUNT**  
**TRIPLE ISOLATED**  
**ULTRA LOW LEAKAGE**  
**SILICON SWITCHING DIODES**



**SOT-363 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



**LEAD CODE:**

- 1) Anode D1
- 2) Anode D2
- 3) Anode D3
- 4) Cathode D3
- 5) Cathode D2
- 6) Cathode D1

**MARKING CODE: K01**

| 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)

R5 (9-May 2011)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### 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

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### CONTACT US

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