

CMXD6001

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



www.centrasemi.com

**SUPERmini™**



**SOT-26 CASE**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMXD6001 type contains three (3) Isolated Silicon Switching Diodes, manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, and designed for switching applications requiring extremely low leakage.

**MARKING CODE: X01**

**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>  
V<sub>RRM</sub>  
I<sub>F</sub>  
I<sub>FRM</sub>  
I<sub>FSM</sub>  
I<sub>FSM</sub>  
P<sub>D</sub>  
T<sub>J</sub>, T<sub>stg</sub>  
θ<sub>JA</sub>

75  
100  
250  
250  
4.0  
1.0  
350  
-65 to +150  
357

**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    |

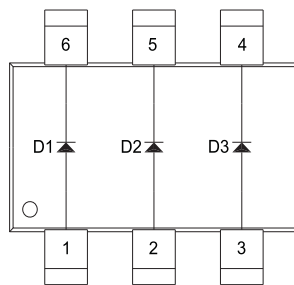
**CMXD6001**  
**SURFACE MOUNT**  
**TRIPLE ISOLATED**  
**ULTRA LOW LEAKAGE**  
**SILICON SWITCHING DIODES**



**SOT-26 CASE - MECHANICAL OUTLINE**



**PIN CONFIGURATION**



| SYMBOL | INCHES |       | MILLIMETERS |      |
|--------|--------|-------|-------------|------|
|        | MIN    | MAX   | MIN         | MAX  |
| A      | 0.004  | 0.007 | 0.11        | 0.19 |
| B      | 0.016  | -     | 0.40        | -    |
| C      | -      | 0.004 | -           | 0.10 |
| D      | 0.039  | 0.047 | 1.00        | 1.20 |
| E      | 0.074  | 0.075 | 1.88        | 1.92 |
| F      | 0.037  | 0.038 | 0.93        | 0.97 |
| G      | 0.102  | 0.118 | 2.60        | 3.00 |
| H      | 0.059  | 0.067 | 1.50        | 1.70 |
| I      | 0.016  |       | 0.41        |      |
| J      | 0.110  | 0.118 | 2.80        | 3.00 |

SOT-26 (REV: R2)

**LEAD CODE:**

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

**MARKING CODE: X01**

R4 (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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