

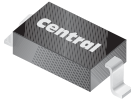
CMDD6001

**SURFACE MOUNT
ULTRA LOW LEAKAGE
SILICON SWITCHING DIODE**



www.centrasemi.com

SUPERmini™



SOD-323 CASE

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDD6001 type is a silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for switching applications requiring an extremely low leakage diode.

MARKING CODE: C61

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_R
 V_{RRM}
 I_F
 I_{FRM}
 I_{FSM}
 I_{FSM}
 P_D
 T_J, T_{stg}
 θ_{JA}

75
100
250
250
4.0
1.0
250
-65 to +150
500

UNITS

V
V
mA
mA
A
A
mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|----------|---|-----|------|---------------|
| I_R | $V_R=75\text{V}$ | | 500 | pA |
| BV_R | $I_R=100\mu\text{A}$ | 100 | | V |
| V_F | $I_F=1.0\text{mA}$ | | 0.85 | V |
| V_F | $I_F=10\text{mA}$ | | 0.95 | V |
| V_F | $I_F=100\text{mA}$ | | 1.1 | V |
| C_T | $V_R=0, f=1.0\text{MHz}$ | | 2.0 | pF |
| t_{rr} | $I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$ | | 3.0 | μs |

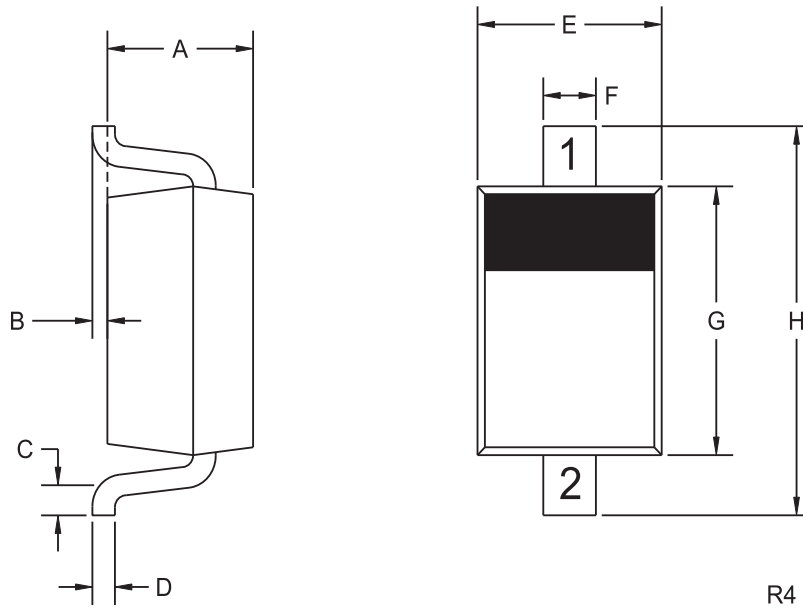
R5 (9-May 2011)

CMDD6001

SURFACE MOUNT
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SOD-323 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: C61

| SYMBOL | INCHES | | MILLIMETERS | |
|--------|--------|-------|-------------|------|
| | MIN | MAX | MIN | MAX |
| A | 0.031 | 0.039 | 0.80 | 1.00 |
| B | 0.000 | 0.004 | 0.00 | 0.10 |
| C | 0.008 | - | 0.20 | - |
| D | 0.004 | 0.007 | 0.11 | 0.19 |
| E | 0.045 | 0.053 | 1.15 | 1.35 |
| F | - | 0.014 | - | 0.35 |
| G | 0.063 | 0.071 | 1.60 | 1.80 |
| H | 0.094 | 0.102 | 2.40 | 2.60 |

SOD-323 (REV: R4)

R5 (9-May 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 (2nd 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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