

CMPD6001  
CMPD6001A  
CMPD6001C  
CMPD6001S

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



**SOT-23 CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPD6001 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for switching applications requiring an extremely low leakage diode.

The following configurations are available:

CMPD6001 SINGLE  
CMPD6001A DUAL, COMMON ANODE  
CMPD6001C DUAL, COMMON CATHODE  
CMPD6001S DUAL, IN SERIES

**MARKING CODE: ULO**

**MARKING CODE: ULA**

**MARKING CODE: ULC**

**MARKING CODE: ULS**

**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**

$V_R$  75  
 $V_{RRM}$  100  
 $I_F$  250  
 $I_{FRM}$  250  
 $I_{FSM}$  4.0  
 $I_{FSM}$  1.0  
 $P_D$  350  
 $T_J, T_{stg}$  -65 to +150  
 $\theta_{JA}$  357

**UNITS**

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

**ELECTRICAL CHARACTERISTICS PER DIODE: ( $T_A=25^\circ\text{C}$  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  | $\mu\text{s}$ |

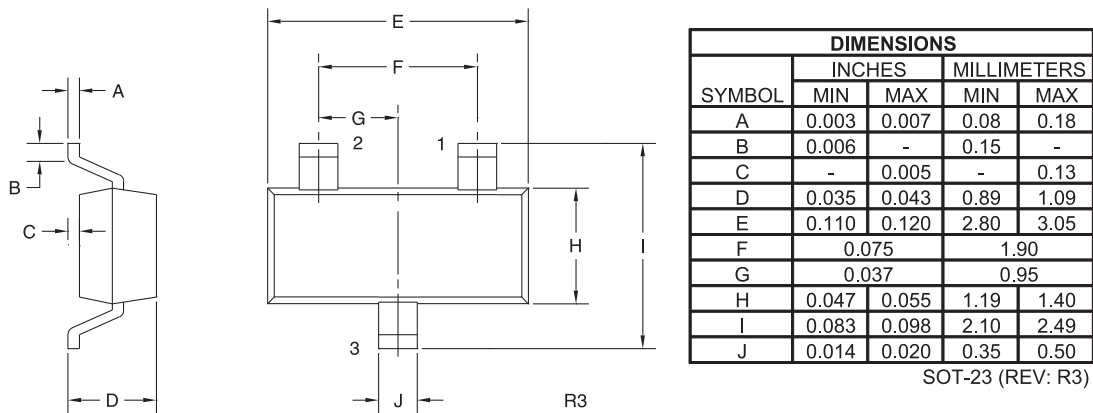
R5 (9-May 2011)

CMPD6001  
CMPD6001A  
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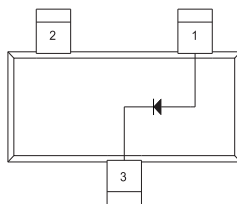
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## SOT-23 CASE - MECHANICAL OUTLINE



## PIN CONFIGURATIONS

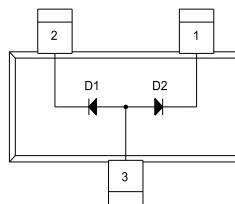


**CMPD6001**

**LEAD CODE:**

- 1) Anode
- 2) No Connection
- 3) Cathode

**MARKING CODE: ULO**

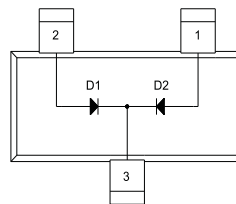


**CMPD6001A**

**LEAD CODE:**

- 1) Cathode D2
- 2) Cathode D1
- 3) Anode D1, D2

**MARKING CODE: ULA**

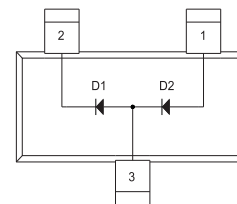


**CMPD6001C**

**LEAD CODE:**

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

**MARKING CODE: ULC**



**CMPD6001S**

**LEAD CODE:**

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2

**MARKING CODE: ULS**

R5 (9-May 2011)