

CMPD6001  
CMPD6001A  
CMPD6001C  
CMPD6001S

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



**SOT-23 CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPD6001 series devices 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)

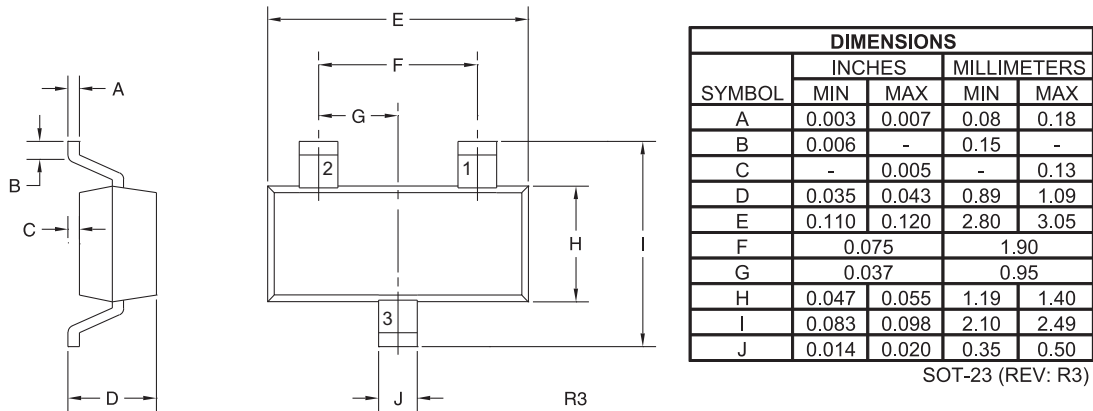
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=75\text{V}$		500	pA
$BV_R$	$I_R=100\mu\text{A}$	100		V
$V_F$	$I_F=1.0\text{mA}$		0.85	V
$V_F$	$I_F=10\text{mA}$		0.95	V
$V_F$	$I_F=100\text{mA}$		1.1	V
$C_J$	$V_R=0, f=1.0\text{MHz}$		2.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$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

CMPD6001  
CMPD6001A  
CMPD6001C  
CMPD6001S

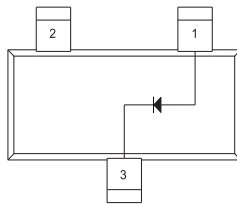
**SURFACE MOUNT SILICON  
ULTRA LOW LEAKAGE  
SWITCHING DIODES**



## SOT-23 CASE - MECHANICAL OUTLINE



## PIN CONFIGURATIONS

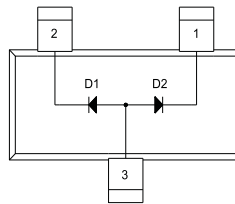


**CMPD6001**

**LEAD CODE:**

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

**MARKING CODE: ULO**

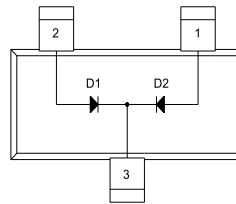


**CMPD6001A**

**LEAD CODE:**

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

**MARKING CODE: ULA**

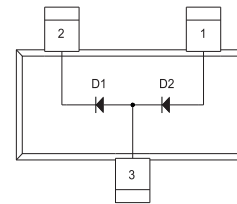


**CMPD6001C**

**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**

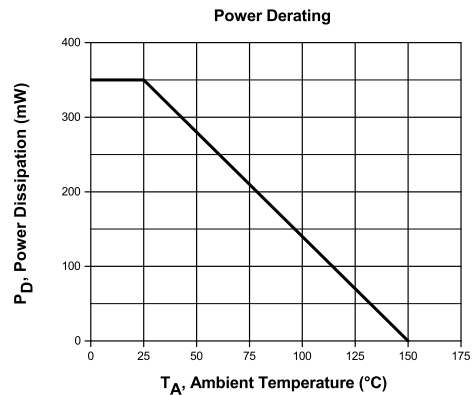
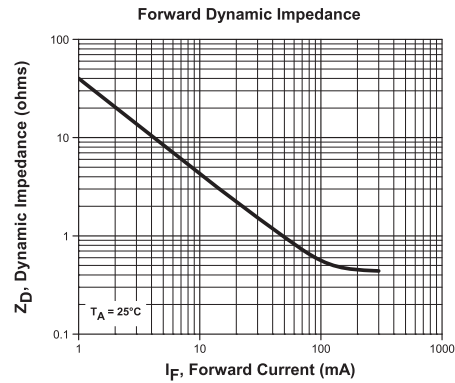
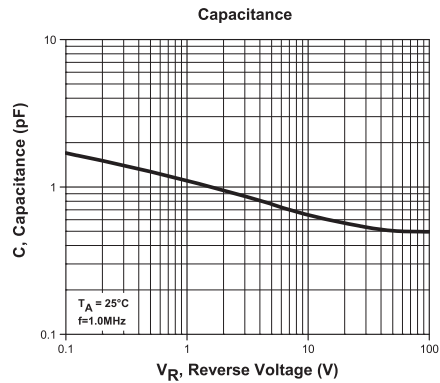
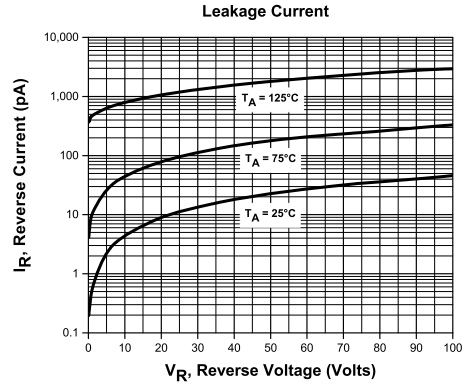
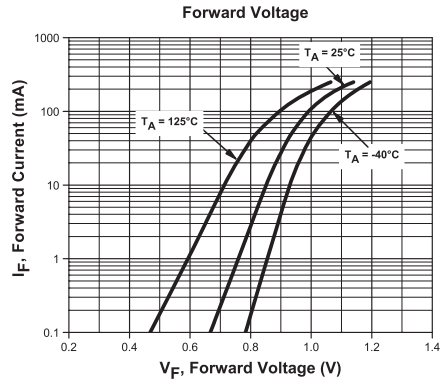
R6 (16-February 2017)

CMPD6001  
CMPD6001A  
CMPD6001C  
CMPD6001S

SURFACE MOUNT SILICON  
ULTRA LOW LEAKAGE  
SWITCHING DIODES



## TYPICAL ELECTRICAL CHARACTERISTICS



R6 (16-February 2017)

## 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)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Central Semiconductor:

[CMPD6001](#) [CMPD6001A](#) [CMPD6001C](#) [CMPD6001S](#) [CMPD6001A TR](#) [CMPD6001C TR](#) [CMPD6001S TR](#)  
[CMPD6001 TR](#) [CMPD6001C BK](#) [CMPD6001 BK](#) [CMPD6001A BK](#) [CMPD6001S BK](#)