

CMPD6001
CMPD6001A
CMPD6001C
CMPD6001S

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



SOT-23 CASE



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
 Θ_{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)

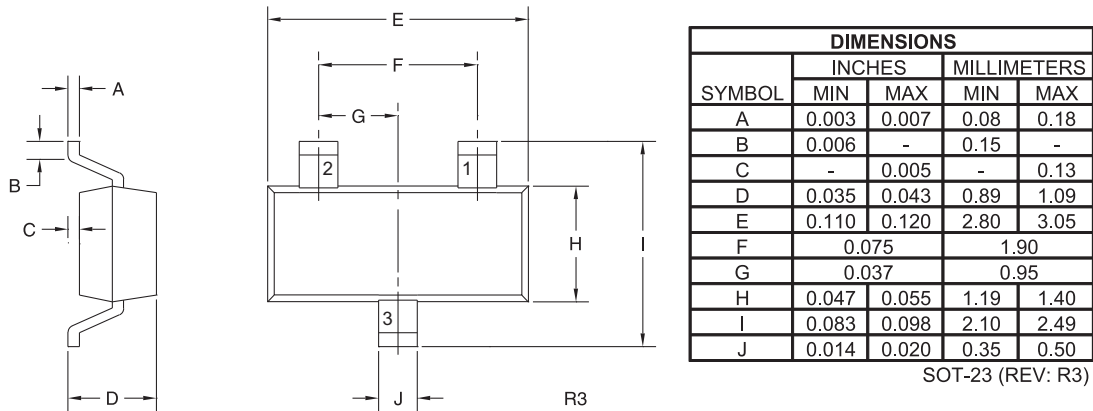
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=75\text{V}$		500	pA
BV_R	$I_R=100\mu\text{A}$	100		V
V_F	$I_F=1.0\text{mA}$		0.85	V
V_F	$I_F=10\text{mA}$		0.95	V
V_F	$I_F=100\text{mA}$		1.1	V
C_J	$V_R=0, f=1.0\text{MHz}$		2.0	pF
t_{rr}	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		3.0	μs

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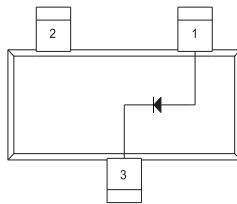
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SOT-23 CASE - MECHANICAL OUTLINE



PIN CONFIGURATIONS

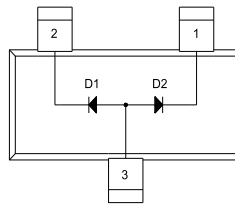


CMPD6001

LEAD CODE:

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

MARKING CODE: ULO

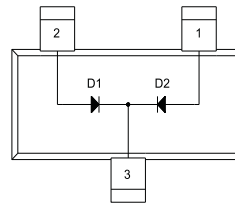


CMPD6001A

LEAD CODE:

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

MARKING CODE: ULA

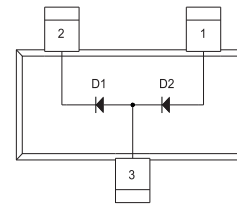


CMPD6001C

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

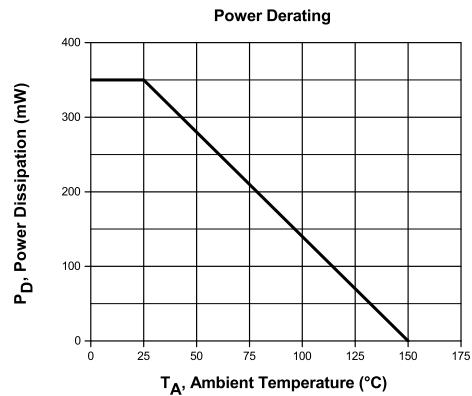
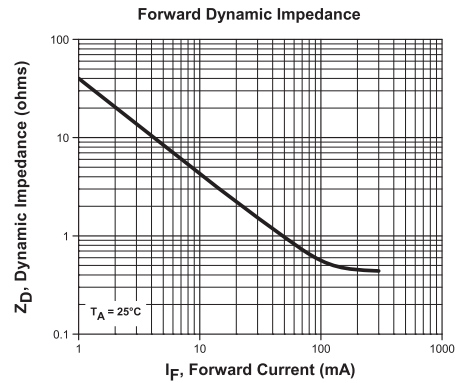
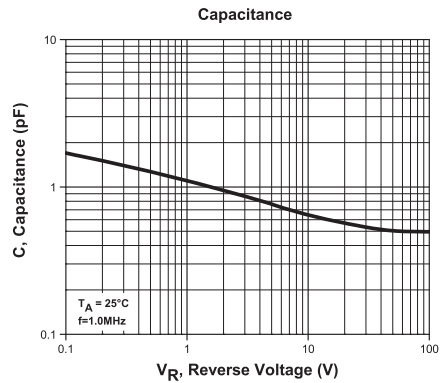
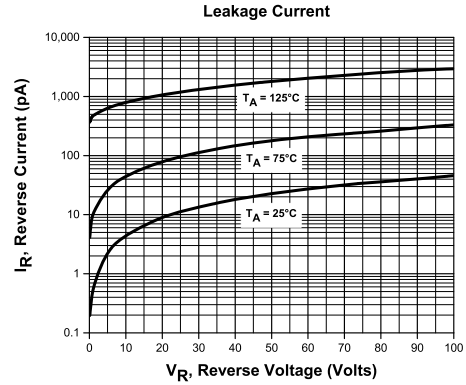
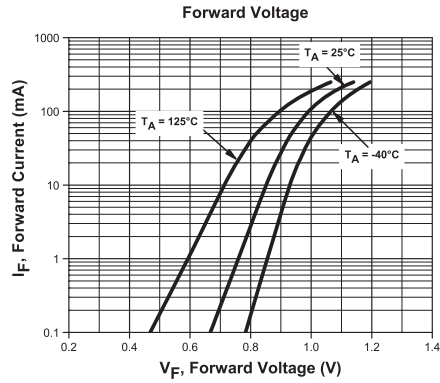
R6 (16-February 2017)

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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 (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

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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