

CMPD6001
 CMPD6001A
 CMPD6001C
 CMPD6001S

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



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.



SOT-23 CASE

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		UNITS
V_R	75	V
V_{RRM}	100	V
I_F	250	mA
I_{FRM}	250	mA
I_{FSM}	4.0	A
I_{FSM}	1.0	A
P_D	350	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	357	$^\circ\text{C/W}$

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

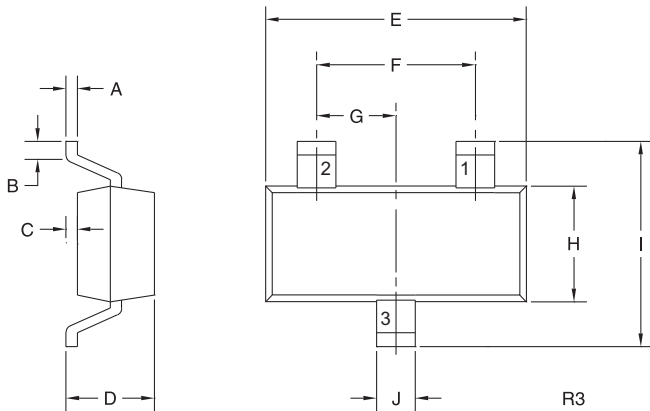
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=75\text{V}$		500	pA
BV_R	$I_R=100\mu\text{A}$	100		V
V_F	$I_F=1.0\text{mA}$		0.85	V
V_F	$I_F=10\text{mA}$		0.95	V
V_F	$I_F=100\text{mA}$		1.1	V
C_J	$V_R=0, f=1.0\text{MHz}$		2.0	pF
t_{rr}	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		3.0	μs

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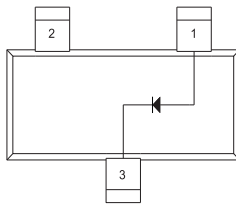
SOT-23 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

PIN CONFIGURATIONS

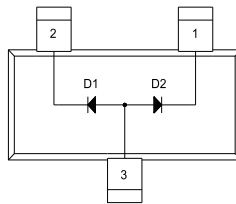


CMPD6001

LEAD CODE:

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

MARKING CODE: ULO

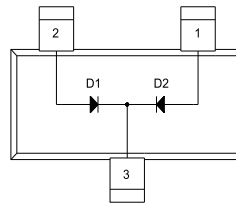


CMPD6001A

LEAD CODE:

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

MARKING CODE: ULA

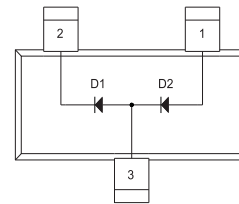


CMPD6001C

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

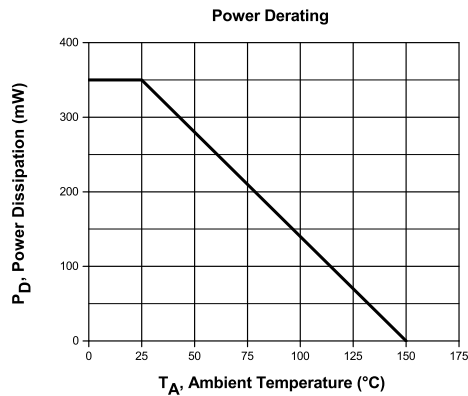
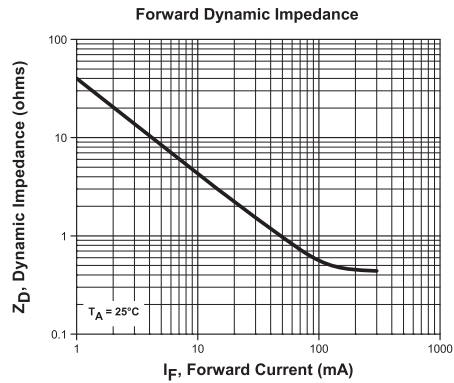
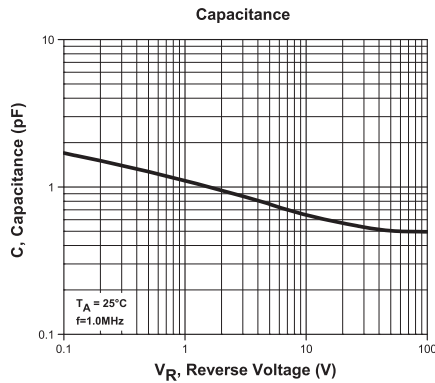
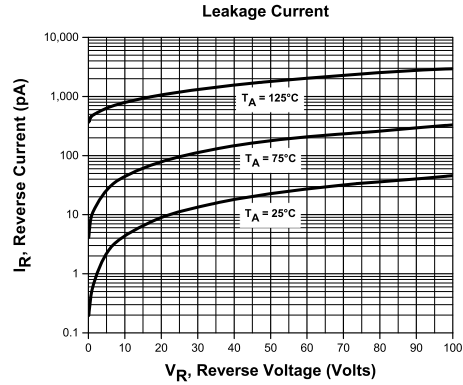
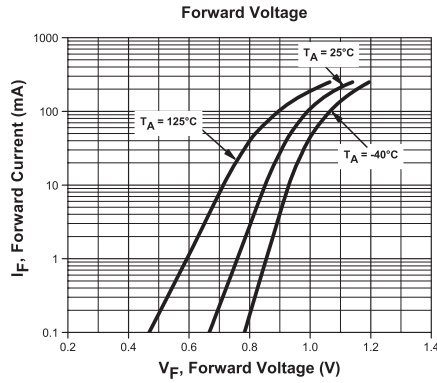
R6 (16-February 2017)

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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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