

CMPD6001  
 CMPD6001A  
 CMPD6001C  
 CMPD6001S

**SURFACE MOUNT  
 LOW LEAKAGE  
 SILICON SWITCHING DIODE**



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.



**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**

$V_R$  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)

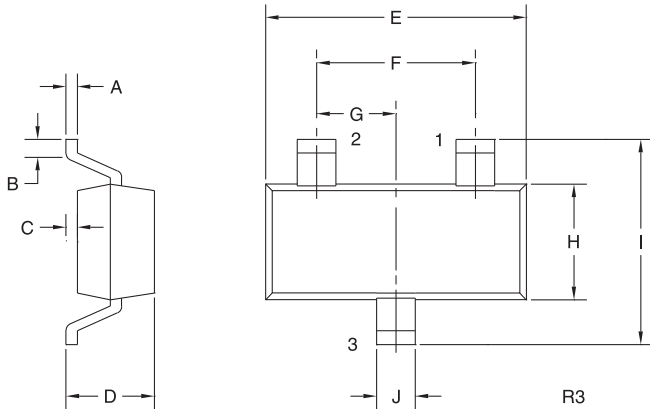
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=75\text{V}$		500	pA
$BV_R$	$I_R=100\mu\text{A}$	100		V
$V_F$	$I_F=1.0\text{mA}$		0.85	V
$V_F$	$I_F=10\text{mA}$		0.95	V
$V_F$	$I_F=100\text{mA}$		1.1	V
$C_T$	$V_R=0, f=1.0\text{MHz}$		2.0	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, R_L=100\Omega, \text{Rec. to }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

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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

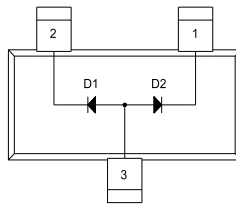
SOT-23 (REV: R3)

**PIN CONFIGURATIONS**



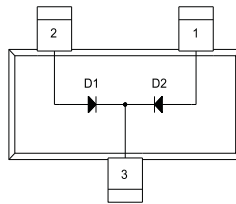
**CMPD6001**  
**LEAD CODE:**  
 1) Anode  
 2) No Connection  
 3) Cathode

**MARKING CODE: ULO**



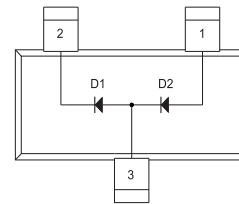
**CMPD6001A**  
**LEAD CODE:**  
 1) Cathode D2  
 2) Cathode D1  
 3) Anode D1, D2

**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**

R4 (27-January 2010)