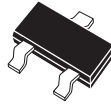


CMPD6001  
 CMPD6001A  
 CMPD6001C  
 CMPD6001S

**SURFACE MOUNT  
 LOW LEAKAGE  
 SILICON SWITCHING DIODE**



**SOT-23 CASE**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**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	<b>MARKING CODE: ULO</b>
CMPD6001A	DUAL, COMMON ANODE	<b>MARKING CODE: ULA</b>
CMPD6001C	DUAL, COMMON CATHODE	<b>MARKING CODE: ULC</b>
CMPD6001S	DUAL, IN SERIES	<b>MARKING CODE: ULS</b>

**MAXIMUM RATINGS:** ( $T_A=25^{\circ}\text{C}$ )

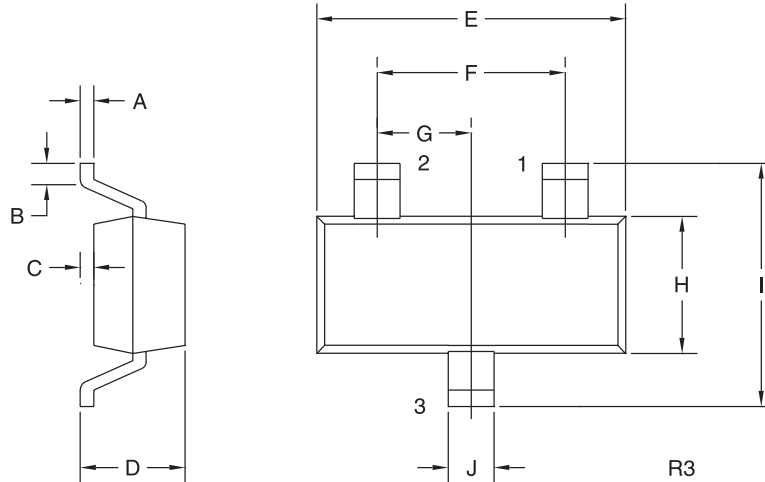
	<b>SYMBOL</b>		<b>UNITS</b>
Continuous Reverse Voltage	$V_R$	75	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Continuous Forward Current	$I_F$	250	mA
Peak Repetitive Forward Current	$I_{FRM}$	250	mA
Forward Surge Current, $t_p=1 \mu\text{sec}$ .	$I_{FSM}$	4000	mA
Forward Surge Current, $t_p=1 \text{sec}$ .	$I_{FSM}$	1000	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JA}$	357	$^{\circ}\text{C}/\text{W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=75\text{V}$		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	$\mu\text{s}$

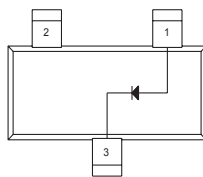
**SURFACE MOUNT  
 LOW LEAKAGE  
 SILICON SWITCHING DIODE**

**SOT-23 CASE - MECHANICAL OUTLINE**



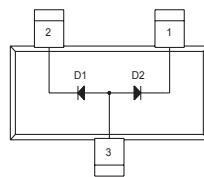
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)



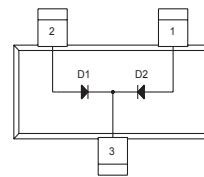
**LEAD CODE:**  
**CMPD6001**  
 1) Anode  
 2) No Connection  
 3) Cathode

**MARKING  
 CODE: ULO**



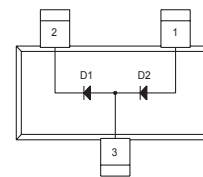
**LEAD CODE:**  
**CMPD6001A**  
 1) Cathode D2  
 2) Cathode D1  
 3) Anode D1, Anode D2

**MARKING  
 CODE: ULA**



**LEAD CODE:**  
**CMPD6001C**  
 1) Anode D2  
 2) Anode D1  
 3) Cathode D1, Cathode D2

**MARKING  
 CODE: ULC**



**LEAD CODE:**  
**CMPD6001S**  
 1) Anode D2  
 2) Cathode D1  
 3) Anode D1, Cathode D2

**MARKING  
 CODE: ULS**

R3 (6-August 2003)