

CMPD6001  
CMPD6001A  
CMPD6001C  
CMPD6001S

SURFACE MOUNT  
LOW LEAKAGE  
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	MARKING CODE: ULO
CMPD6001A	DUAL, COMMON ANODE	MARKING CODE: ULA
CMPD6001C	DUAL, COMMON CATHODE	MARKING CODE: ULC
CMPD6001S	DUAL, IN SERIES	MARKING CODE: ULS

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

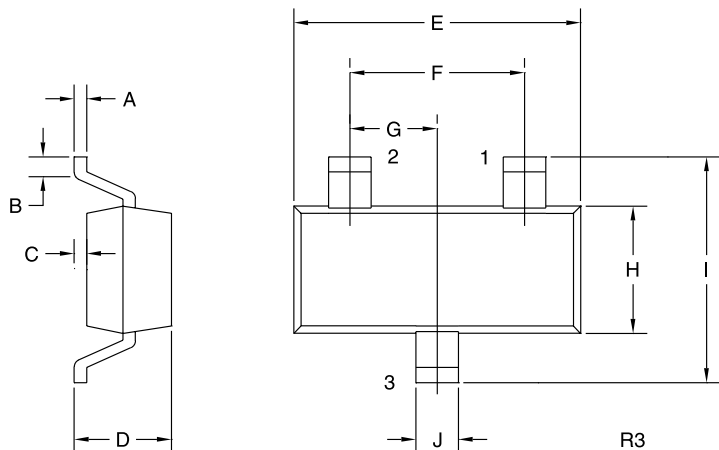
	SYMBOL		UNITS
Continuous Reverse Voltage	$V_R$	75	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Continuous Forward Current	$I_F$	250	mA
Peak Repetitive Forward Current	$I_{FRM}$	250	mA
Forward Surge Current, $t_p=1\ \mu\text{sec.}$	$I_{FSM}$	4000	mA
Forward Surge Current, $t_p=1\ \text{sec.}$	$I_{FSM}$	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	$^{\circ}\text{C/W}$

**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
$V_{BR}$	$I_R=100\ \mu\text{A}$	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	$\mu\text{s}$

R1 ( 01-Mar 2001)

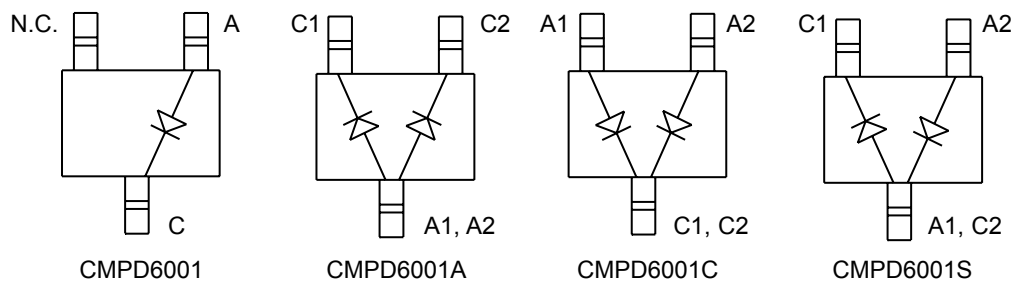
**SOT-23 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	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 Configuration**



R1 ( 01-Mar 2001)