

CMPD6001
CMPD6001A
CMPD6001C
CMPD6001S

SURFACE MOUNT
LOW LEAKAGE
SWITCHING DIODE



SOT-23 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD6001 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for switching applications requiring a 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: ($T_A=25^{\circ}\text{C}$)

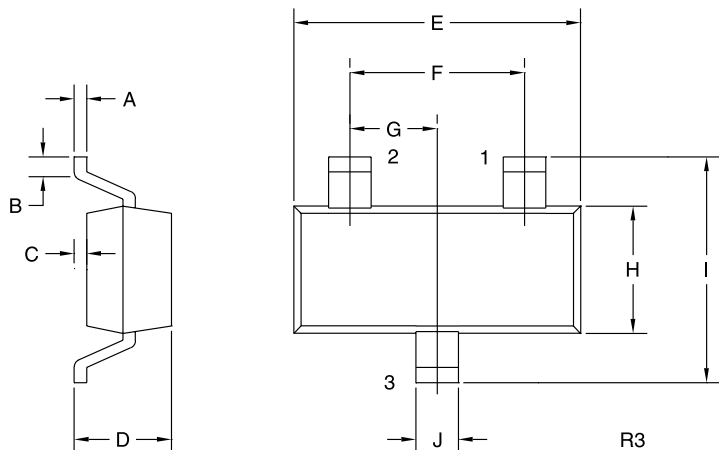
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Forward Surge Current, $t_p=1\ \mu\text{sec.}$	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1\ \text{sec.}$	I_{FSM}	1000	mA
Power Dissipation	P_D	350	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	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
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}	$I_R=I_F=10\text{mA}$, $R_L=100\ \Omega$, Rec. to 1.0mA		3.0	μs

R1 (01-Mar 2001)

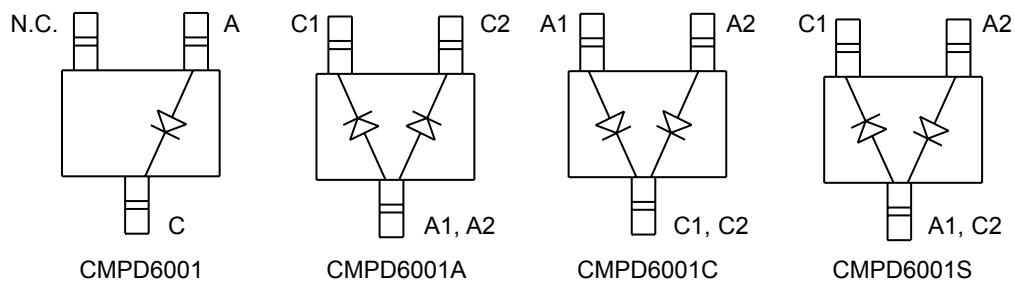
SOT-23 CASE - MECHANICAL OUTLINE



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)