

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

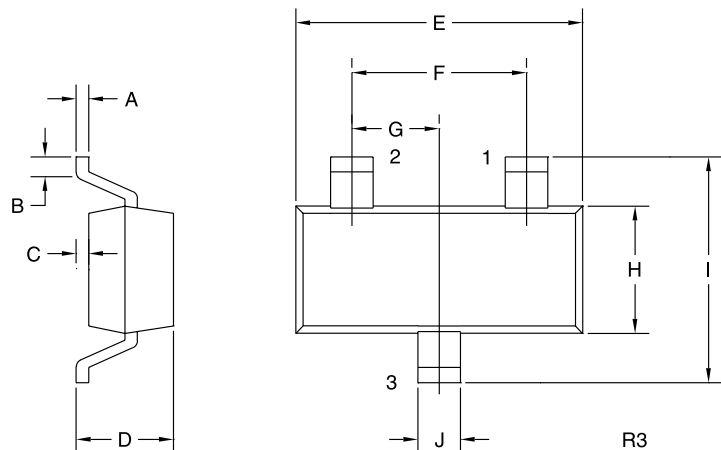
	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	75	V
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	250	mA
Peak Repetitive Forward Current	I_{FRM}	250	mA
Forward Surge Current, $t_p=1\ \mu\text{sec.}$	I_{FSM}	4000	mA
Forward Surge Current, $t_p=1\ \text{sec.}$	I_{FSM}	1000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

R1 (01-Mar 2001)

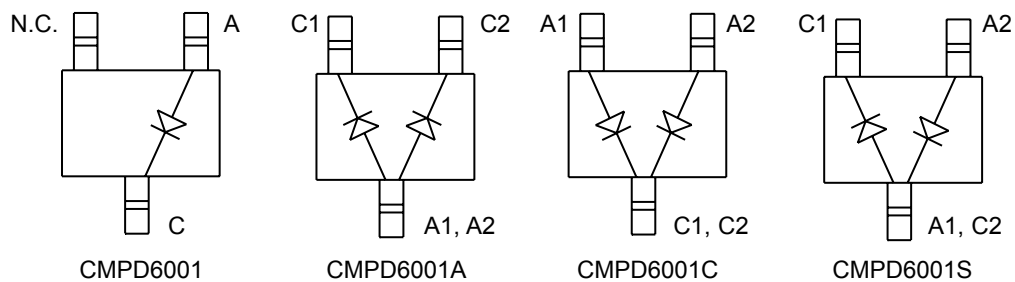
SOT-23 CASE - MECHANICAL OUTLINE



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)