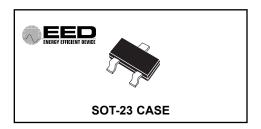
CMPD6001A CMPD6001C CMPD6001S

#### SURFACE MOUNT LOW LEAKAGE SILICON SWITCHING DIODE





#### **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<sub>A</sub>=25°C)

	SYMBOL		UNITS	
Continuous Reverse Voltage	$V_{R}$	75	V	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V	
Continuous Forward Current	I <sub>F</sub>	250	mA	
Peak Repetitive Forward Current	I <sub>FRM</sub>	250	mA	
Forward Surge Current, tp=1 µsec.	I <sub>FSM</sub>	4000	mA	
Forward Surge Current, tp=1 sec.	I <sub>FSM</sub>	1000	mA	
Power Dissipation	PD	350	mW	
Operating and Storage				
Junction Temperature	$T_{J}, T_{stg}$	-65 to +150	°C	
Thermal Resistance	$\Theta_{\sf JA}$	357	°C/W	

### **ELECTRICAL CHARACTERISTICS PER DIODE**: (T<sub>A</sub>=25°C unless otherwise noted)

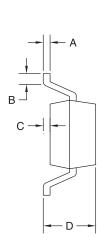
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{R}$	V <sub>R</sub> =75V		500	pА
V <sub>BR</sub>	I <sub>R</sub> =100μA	100		V
V <sub>F</sub>	I <sub>F</sub> =1.0mA		0.85	V
$V_{F}$	I <sub>F</sub> =10mA		0.95	V
٧ <sub>F</sub>	I <sub>F</sub> =100mA		1.1	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0 MHz		2.0	pF
t <sub>rr</sub>	$I_R=I_F=10$ mA, $R_L=100\Omega$ , Rec. to 1.0mA		3.0	μs

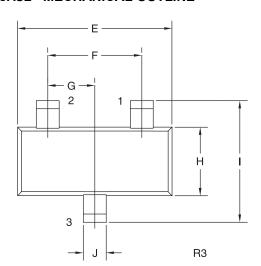


CMPD6001 CMPD6001A CMPD6001C CMPD6001S

#### SURFACE MOUNT LOW LEAKAGE SILICON SWITCHING DIODE

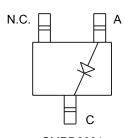
## **SOT-23 CASE - MECHANICAL OUTLINE**



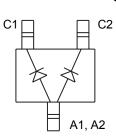


DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
Α	0.003	0.007	0.08	0.18		
В	0.006	-	0.15	-		
С	ı	0.005	-	0.13		
D	0.035	0.043	0.89	1.09		
E	0.110	0.120	2.80	3.05		
F	0.075		1.90			
G	0.037		0.95			
Н	0.047	0.055	1.19	1.40		
1	0.083	0.098	2.10	2.49		
J	0.014	0.020	0.35	0.50		
SOT-23 (REV: R3)						

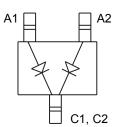
# Pin Configuration



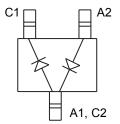
CMPD6001 MARKING CODE: ULO



CMPD6001A MARKING CODE: ULA



CMPD6001C MARKING CODE: ULC



CMPD6001S MARKING CODE: ULS

R2 (13-November 2002)