CMPD6001
CMPD6001A
CMPD6001C
CMPD6001S

SURFACE MOUNT
ULTRA LOW LEAKAGE
SILICON SWITCHING DIODES

EED
ENERGY EFFICIENT DEVICE

SOT-23 CASE

Central™
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°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
Peak Forward Surge Current, tp=1.0µs	I_{FSM}	4.0	A
Peak Forward Surge Current, tp=1.0s	I_{FSM}	1.0	A
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	V_R=75V		500	pA
BV_R	I_R=100µA	100		V
V_F	I_F=1.0mA		0.85	V
V_F	I_F=10mA		0.95	V
V_F	I_F=100mA		1.1	V
C_T	V_R=0, f=1.0MHz		2.0	pF
t_{rr}	I_R=I_F=10mA, I_{rr}=1.0mA, R_L=100Ω		3.0	µs

R5 (9-May 2011)

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SOT-23 CASE - MECHANICAL OUTLINE
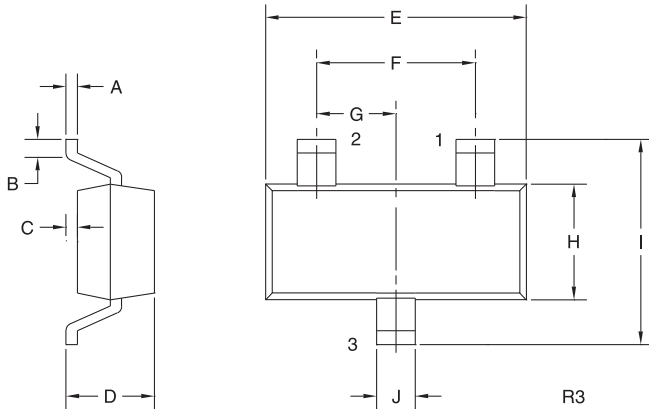
DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

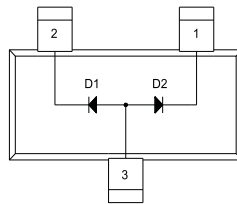SOT-23 (REV: R3)

PIN CONFIGURATIONS

CMPD6001

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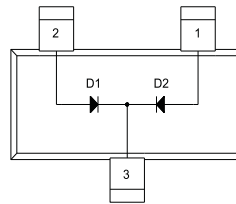3) Cathode

MARKING CODE: ULO

CMPD6001A

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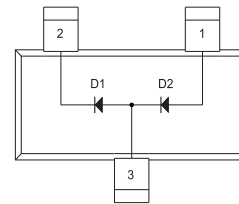3) Anode D1, D2

MARKING CODE: ULA

CMPD6001C

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

MARKING CODE: ULC

CMPD6001S

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

MARKING CODE: ULS

R5 (9-May 2011)