

CMPD3003
CMPD3003A
CMPD3003C
CMPD3003S

**SURFACE MOUNT
LOW LEAKAGE
SILICON SWITCHING DIODE**



SOT-23 CASE

The following configurations are available:

CMPD3003	SINGLE
CMPD3003A	DUAL, COMMON ANODE
CMPD3003C	DUAL, COMMON CATHODE
CMPD3003S	DUAL, IN SERIES

MARKING CODE: LLO
MARKING CODE: LLA
MARKING CODE: LLC
MARKING CODE: LLS

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

	SYMBOL		UNITS
Continuous Reverse Voltage	V_R	180	V
Average Rectified Current	I_O	200	mA
DC Forward Current	I_F	600	mA
Peak Repetitive Forward Current	I_{FRM}	700	mA
Peak Forward Surge Current, $t_p=1 \mu\text{s}$	I_{FSM}	2.0	A
Peak Forward Surge Current, $t_p=1 \text{ s}$	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: ($T_A=25^\circ\text{C}$ unless otherwise noted)

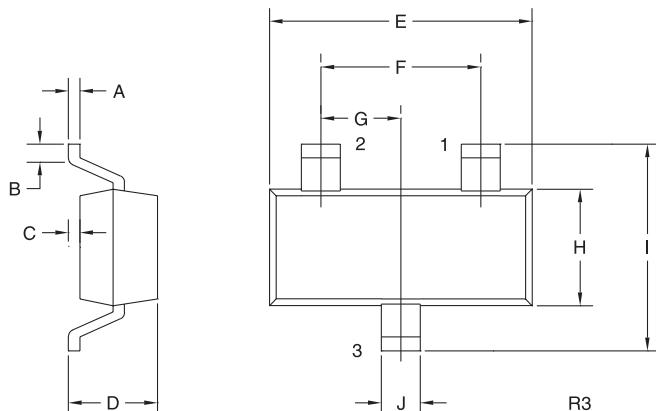
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
BV_R	$I_R=5.0\mu\text{A}$	200		V
I_R	$V_R=125\text{V}$		1.0	nA
I_R	$V_R=125\text{V}, T_A=150^\circ\text{C}$		3.0	μA
I_R	$V_R=180\text{V}$		10	nA
I_R	$V_R=180\text{V}, T_A=150^\circ\text{C}$		5.0	μA
V_F	$I_F=1.0\text{mA}$	0.62	0.72	V
V_F	$I_F=10\text{mA}$	0.72	0.83	V
V_F	$I_F=50\text{mA}$	0.80	0.89	V
V_F	$I_F=100\text{mA}$	0.83	0.93	V
V_F	$I_F=200\text{mA}$	0.87	1.10	V
V_F	$I_F=300\text{mA}$	0.90	1.15	V
C_T	$V_R=0, f=1 \text{ MHz}$		4.0	pF

CentralTM
Semiconductor Corp.

DESCRIPTION:

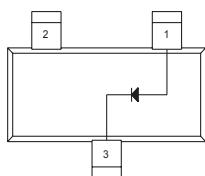
The CENTRAL SEMICONDUCTOR CMPD3003 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for switching applications requiring an extremely low leakage diode.

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

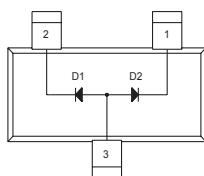
SOT-23 (REV: R3)



LEAD CODE:

- CMPD3003
1) Anode
2) No Connection
3) Cathode

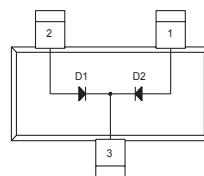
**MARKING
CODE:** LLO



LEAD CODE:

- CMPD3003A
1) Cathode D2
2) Cathode D1
3) Anode D1, Anode D2

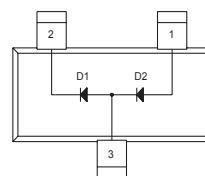
**MARKING
CODE:** LLA



LEAD CODE:

- CMPD3003C
1) Anode D2
2) Anode D1
3) Cathode D1, Cathode D2

**MARKING
CODE:** LLC



LEAD CODE:

- CMPD3003S
1) Anode D2
2) Cathode D1
3) Anode D1, Cathode D2

**MARKING
CODE:** LLS

R3 (6-August 2003)