

CMDD6001

**SUPERmini™  
SURFACE MOUNT  
LOW LEAKAGE  
SWITCHING DIODE**

**SUPERmini™**



**SOD-323 CASE**

# Central™

**Semiconductor Corp.**

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMDD6001 type is a silicon switching diode manufactured by the epitaxial planar process, epoxy molded in a SUPERmini™ surface mount package, designed for switching applications requiring an extremely low leakage diode.

**THE MARKING CODE IS C61.**

## MAXIMUM RATINGS: (T<sub>A</sub>=25°C)

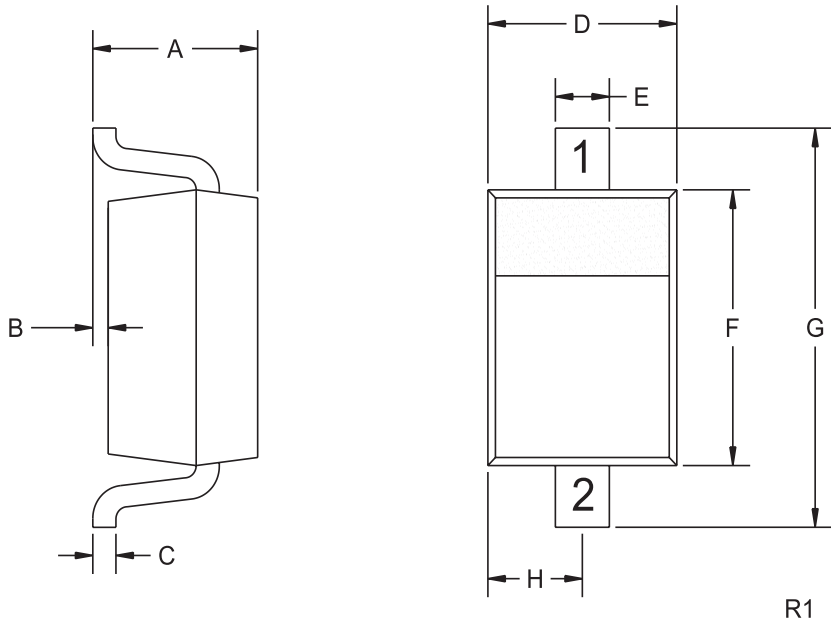
	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	75	V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Continuous Forward Current	I <sub>F</sub>	250	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	250	mA
Forward Surge Current, t <sub>p</sub> =1.0 μsec.	I <sub>FSM</sub>	4000	mA
Forward Surge Current, t <sub>p</sub> =1.0 sec.	I <sub>FSM</sub>	1000	mA
Power Dissipation	P <sub>D</sub>	250	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	500	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =75V		500	pA
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 <sub>F</sub>	I <sub>F</sub> =10mA		0.95	V
V <sub>F</sub>	I <sub>F</sub> =100mA		1.1	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1.0MHz		2.0	pF
t <sub>rr</sub>	I <sub>R</sub> =I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω, Rec. to 1.0mA		3.0	μs

R1 ( 20-July 2001)

SOD-323 - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: C61

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.039	0.043	1.00	1.10
B	0.000	0.004	0.00	0.10
C	0.005	0.008	0.14	0.22
D	0.045	0.053	1.15	1.35
E	0.011	0.015	0.28	0.38
F	0.063	0.071	1.60	1.80
G	0.094	0.102	2.40	2.60
H	0.023	0.027	0.58	0.68

SOD-323 (REV: R1)

R1 ( 20-July 2001)