

**CMDD3003**  
**SUPERmini™**  
**SURFACE MOUNT**  
**LOW LEAKAGE**  
**SWITCHING DIODE**



# Central™

## Semiconductor Corp.

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMDD3003 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 a extremely low leakage diode.

**MARKING CODE: 03C**

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

	SYMBOL		UNITS
Continuous Reverse Voltage	V <sub>R</sub>	180	V
Average Rectified Current	I <sub>O</sub>	200	mA
Continuous Forward Current	I <sub>F</sub>	600	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	700	mA
Forward Surge Current, tp=1.0 μsec.	I <sub>FSM</sub>	2.0	A
Forward Surge Current, tp=1.0 sec.	I <sub>FSM</sub>	1.0	A
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

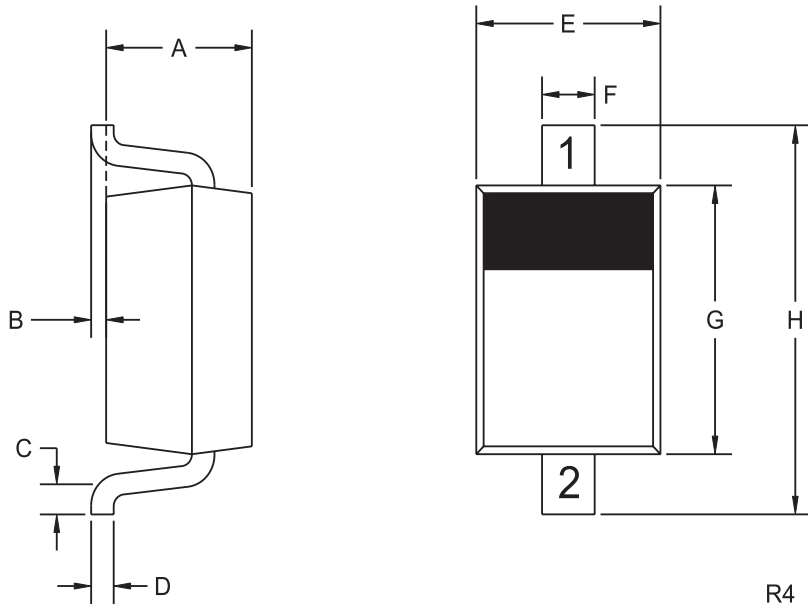
**ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =125V		1.0	nA
I <sub>R</sub>	V <sub>R</sub> =125V, T <sub>A</sub> =150°C		3.0	μA
I <sub>R</sub>	V <sub>R</sub> =180V		10	nA
I <sub>R</sub>	V <sub>R</sub> =180V, T <sub>A</sub> =150°C		5.0	μA
BV <sub>R</sub>	I <sub>R</sub> =5.0μA	200		V
V <sub>F</sub>	I <sub>F</sub> =1.0mA	0.62	0.72	V
V <sub>F</sub>	I <sub>F</sub> =10mA	0.72	0.83	V
V <sub>F</sub>	I <sub>F</sub> =50mA	0.80	0.89	V
V <sub>F</sub>	I <sub>F</sub> =100mA	0.83	0.93	V
V <sub>F</sub>	I <sub>F</sub> =200mA	0.87	1.10	V
V <sub>F</sub>	I <sub>F</sub> =300mA	0.90	1.15	V
C <sub>T</sub>	V <sub>R</sub> =0, f=1 MHz		4.0	pF

R0 (07-June 2004)



**SOD-323 - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) CATHODE
- 2) ANODE

**MARKING CODE: 03C**

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.031	0.039	0.80	1.00
B	0.000	0.004	0.00	0.10
C	0.008	-	0.20	-
D	0.004	0.007	0.11	0.19
E	0.045	0.053	1.15	1.35
F	-	0.014	-	0.35
G	0.063	0.071	1.60	1.80
H	0.094	0.102	2.40	2.60

SOD-323 (REV: R4)