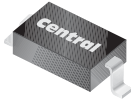


CMDD3003

**SURFACE MOUNT  
LOW LEAKAGE SILICON  
SWITCHING DIODE**

**SUPERmini™**



**SOD-323 CASE**

**Central™**  
Semiconductor Corp.

[www.centrasemi.com](http://www.centrasemi.com)

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

Continuous Reverse Voltage

Average Rectified Current

Continuous Forward Current

Peak Repetitive Forward Current

Peak Forward Surge Current,  $t_p=1.0\mu\text{s}$

Peak Forward Surge Current,  $t_p=1.0\text{s}$

Power Dissipation

Operating and Storage Junction Temperature

Thermal Resistance

**SYMBOL**

$V_R$

$I_O$

$I_F$

$I_{FRM}$

$I_{FSM}$

$I_{FSM}$

$P_D$

$T_J, T_{stg}$

$\theta_{JA}$

180

200

600

700

2.0

1.0

250

-65 to +150

500

**UNITS**

V

mA

mA

mA

A

A

mW

$^\circ\text{C}$

$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

**SYMBOL**

**TEST CONDITIONS**

**MIN**

**MAX**

**UNITS**

$I_R$

$V_R=125\text{V}$

1.0

nA

$I_R$

$V_R=125\text{V}, T_A=150^\circ\text{C}$

3.0

$\mu\text{A}$

$I_R$

$V_R=180\text{V}$

10

nA

$I_R$

$V_R=180\text{V}, T_A=150^\circ\text{C}$

5.0

$\mu\text{A}$

$BV_R$

$I_R=5.0\mu\text{A}$

200

V

$V_F$

$I_F=1.0\text{mA}$

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

$C_T$

$V_R=0, f=1.0\text{MHz}$

4.0

pF

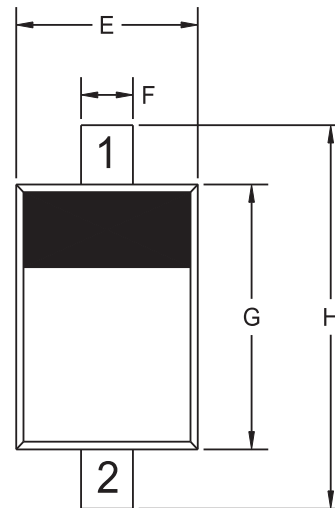
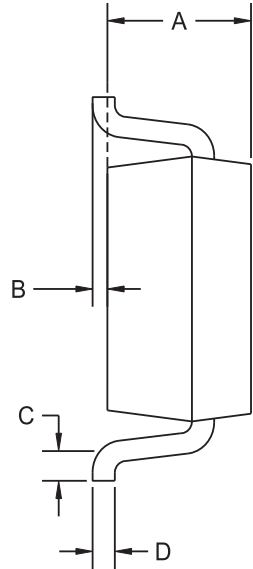
R1 (8-January 2010)

CMDD3003

SURFACE MOUNT  
LOW LEAKAGE SILICON  
SWITCHING DIODE



SOD-323 CASE - MECHANICAL OUTLINE



R4

LEAD CODE:

- 1) CATHODE
- 2) ANODE

MARKING CODE: 03C

SYMBOL	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)

R1 (8-January 2010)