

CMDD3003

**SURFACE MOUNT
LOW LEAKAGE SILICON
SWITCHING DIODE**



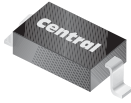
www.centrasemi.com

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

SUPERmini™



SOD-323 CASE

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}

θ_{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	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
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

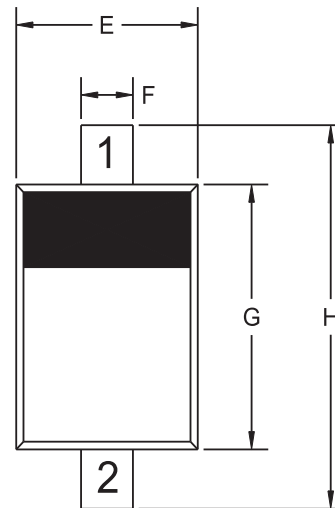
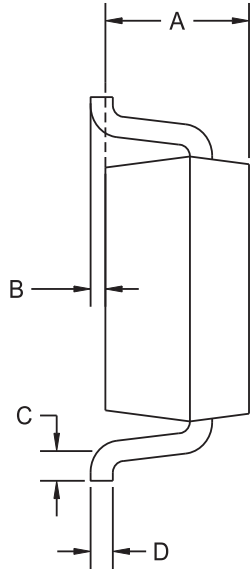
R1 (8-January 2010)

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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)