

CLL2003

HIGH VOLTAGE
SWITCHING DIODE

SOD-80 CASE

CentralTM
Semiconductor Corp.
DESCRIPTION:

The CENTRAL SEMICONDUCTOR CLL2003 type is a silicon switching diode manufactured by the epitaxial planar process, designed for applications requiring high voltage capability.

Marking Code: Cathode band.

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

Continuous Reverse Voltage
 Peak Repetitive Reverse Voltage
 Average Forward Current
 Continuous Forward Current
 Peak Repetitive Forward Current
 Forward Surge Current, $t_p=1\ \mu\text{s}$
 Forward Surge Current, $t_p=1\ \text{s}$
 Power Dissipation
 Operating and Storage
 Junction Temperature
 Thermal Resistance

SYMBOL

V_R 250
 V_{RRM} 250
 I_O 200
 I_F 250
 I_{FRM} 625
 I_{FSM} 4000
 I_{FSM} 1000
 P_D 500

UNITS

V
 V
 mA
 mA
 mA
 mA
 mA
 mA
 mW

T_J, T_{stg}
 Θ_{JA}

-65 to +200
 350

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

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

MIN
 250

MAX**UNITS** BV_R $I_R=100\ \mu\text{A}$

V

 I_R $V_R=200\text{V}$

100

nA

 I_R $V_R=200\text{V}, T_A=150^\circ\text{C}$

100

 μA V_F $I_F=100\text{mA}$

1.00

V

 V_F $I_F=200\text{mA}$

1.25

V

 C_T $V_R=0, f=1\ \text{MHz}$

5.0

pF

 t_{rr}

$I_F=I_R=30\text{mA}, \text{RECOV. TO } 3.0\text{mA},$
 $R_L=100\ \Omega$

50

ns

All dimensions in inches (mm).

