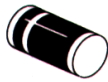


CLL2003

HIGH VOLTAGE  
SWITCHING DIODE



SOD-80 CASE

**Central**<sup>TM</sup>  
**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** ( $T_A=25^{\circ}\text{C}$ )

	<b>SYMBOL</b>		<b>UNITS</b>
Continuous Reverse Voltage	$V_R$	250	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	250	V
Average Forward Current	$I_O$	200	mA
Continuous Forward Current	$I_F$	250	mA
Peak Repetitive Forward Current	$I_{FRM}$	625	mA
Forward Surge Current, $t_p=1 \mu\text{s}$	$I_{FSM}$	4000	mA
Forward Surge Current, $t_p=1 \text{s}$	$I_{FSM}$	1000	mA
Power Dissipation	$P_D$	500	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +200	$^{\circ}\text{C}$
Thermal Resistance	$\Theta_{JA}$	350	$^{\circ}\text{C}/\text{W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>MAX</b>	<b>UNITS</b>
$BV_R$	$I_R=100\mu\text{A}$	250		V
$I_R$	$V_R=200\text{V}$		100	nA
$I_R$	$V_R=200\text{V}, T_A=150^{\circ}\text{C}$		100	$\mu\text{A}$
$V_F$	$I_F=100\text{mA}$		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).

