

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

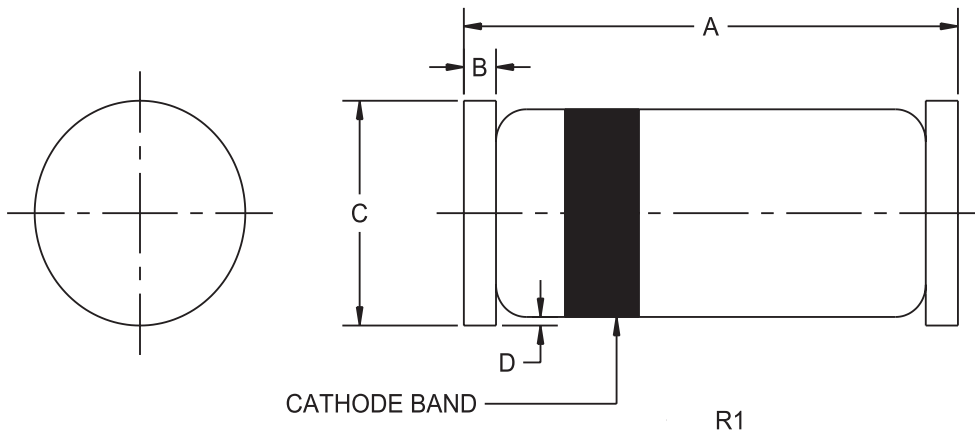
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

	SYMBOL		UNITS
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}	4.0	A
Forward Surge Current, $t_p=1 \text{ s}$	I_{FSM}	1.0	A
Power Dissipation	P_D	500	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +200	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	350	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
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	μA
V_F	$I_F=100\text{mA}$		1.00	V
V_F	$I_F=200\text{mA}$		1.25	V
C_T	$V_R=0, f=1.0 \text{ MHz}$		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

SOD-80 CASE - MECHANICAL OUTLINE



MARKING CODE: CATHODE BAND

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.130	0.146	3.30	3.71
B	0.016		0.41	
C (DIA)	0.051	0.067	1.30	1.70
D	-	0.004	-	0.10

SOD-80 (REV:R1)

R1 (26-September 2002)