

CLL2003

**SURFACE MOUNT
HIGH VOLTAGE SILICON
SWITCHING DIODE**



SOD-80 CASE



www.centrasemi.com

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: 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
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 250
 V_{RRM} 250
 I_O 200
 I_F 250
 I_{FRM} 625
 I_{FSM} 4.0
 I_{FSM} 1.0
 P_D 500
 T_J, T_{stg} -65 to +200
 θ_{JA} 350

UNITS

V
V
mA
mA
mA
A
A
mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

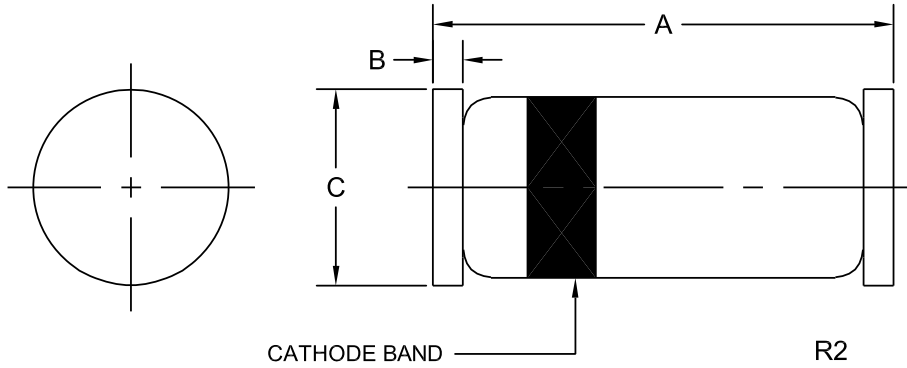
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=200\text{V}$		100	nA
I_R	$V_R=200\text{V}, T_A=150^\circ\text{C}$		100	μA
BV_R	$I_R=100\mu\text{A}$	250		V
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}	$I_F=I_R=30\text{mA}, \text{Rec. to } 3.0\text{mA},$ $R_L=100\Omega$		50	ns

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SOD-80 CASE - MECHANICAL OUTLINE



MARKING: CATHODE BAND

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.130	0.146	3.30	3.71
B	0.014		0.35	
C (DIA)	0.049	0.067	1.25	1.70

SOD-80 (REV:R2)

R3 (8-January 2010)