

CentralTM Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CLL3595 type is an epitaxial planar silicon diode, manufactured in a hermetically sealed glass surface mount package, designed for low leakage, high conductance applications.

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

Peak Repetitive Reverse Voltage
Peak Working Reverse Voltage
Average Forward Current
Forward Steady-State Current
Recurrent Peak Forward Current
Peak Forward Surge Current (1.0s pulse)
Peak Forward Surge Current (1.0 μ s pulse)
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

SYMBOL

UNITS

V_{RRM}	150	V
V_{RWM}	125	V
I_O	150	mA
I_F	225	mA
i_f	600	mA
I_{FSM}	500	mA
I_{FSM}	4.0	A
P_D	500	mW
T_J, T_{stg}	-65 to +200	$^{\circ}\text{C}$
Θ_{JA}	350	$^{\circ}\text{C/W}$

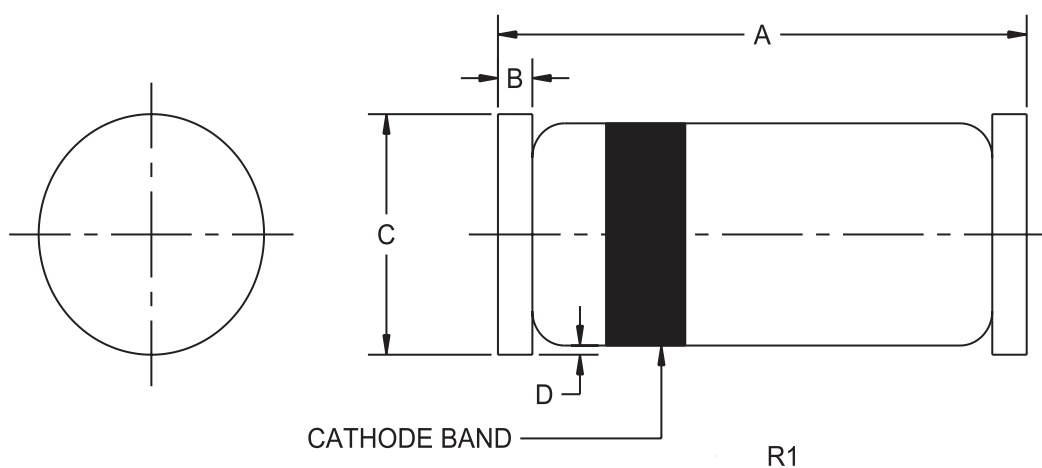
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
BV_R	$I_R=100\mu\text{A}$	150		V
I_R	$V_R=125\text{V}$		1.0	nA
I_R	$V_R=125\text{V}, T_A=125^{\circ}\text{C}$		500	nA
I_R	$V_R=125\text{V}, T_A=150^{\circ}\text{C}$		3.0	μA
I_R	$V_R=30\text{V}, T_A=125^{\circ}\text{C}$		300	nA
V_F	$I_F=1.0\text{mA}$	0.54	0.69	V
V_F	$I_F=5.0\text{mA}$	0.62	0.77	V
V_F	$I_F=10\text{mA}$	0.65	0.80	V
V_F	$I_F=50\text{mA}$	0.75	0.88	V
V_F	$I_F=100\text{mA}$	0.79	0.92	V
V_F	$I_F=200\text{mA}$	0.83	1.00	V
C_T	$V_R=0, f=1.0\text{MHz}$		8.0	pF
t_{rr}	$V_R=3.5\text{V}, I_F=10\text{mA}, R_L=1.0\text{k}\Omega$		3.0	μs

R1 (25-September 2001)

**SURFACE MOUNT
LOW LEAKAGE SILICON DIODE**

SOD-80 CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	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)