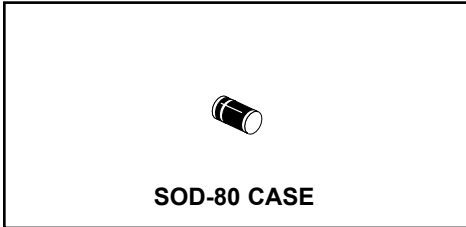


CLL3595

**SURFACE MOUNT
LOW LEAKAGE SILICON DIODE**



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

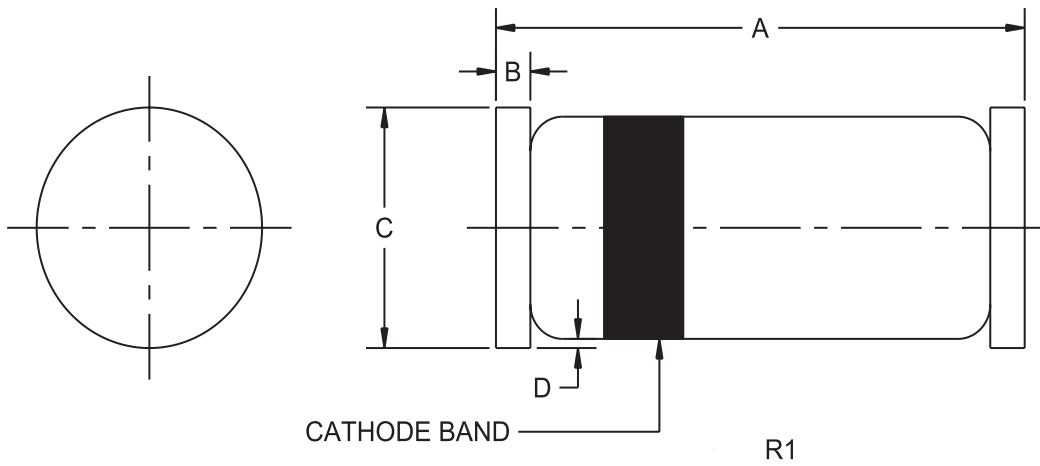
	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	150	V
Peak Working Reverse Voltage	V_{RWM}	125	V
Average Forward Current	I_O	150	mA
Forward Steady-State Current	I_F	225	mA
Recurrent Peak Forward Current	i_f	600	mA
Peak Forward Surge Current (1.0s pulse)	I_{FSM}	500	mA
Peak Forward Surge Current (1.0 μ s pulse)	I_{FSM}	4.0	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	$I_R=100\mu\text{A}$	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

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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)

R1 (25-September 2001)