

CLL3595

SURFACE MOUNT
LOW LEAKAGE SILICON DIODE



www.centralesemi.com



SOD-80 CASE

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.

MARKING: CATHODE BAND

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

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 (1.0μs pulse)	I_{FSM}	4.0	A
Power Dissipation	P_D	500	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200	°C
Thermal Resistance	Θ_{JA}	350	°C/W

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

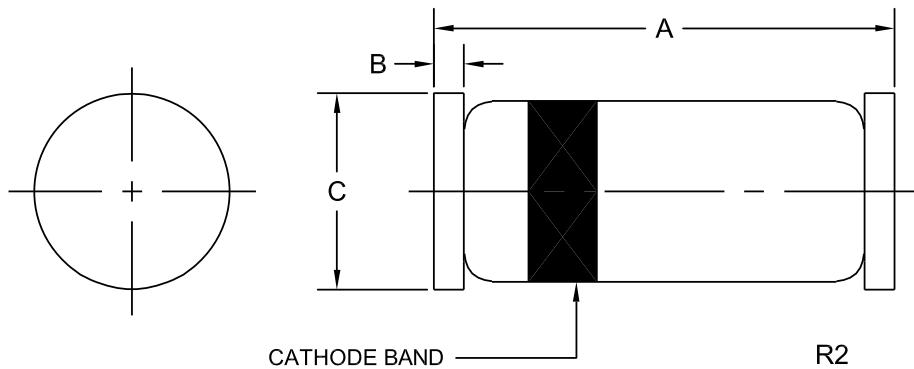
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=125\text{V}$		1.0	nA
I_R	$V_R=125\text{V}, T_A=125^\circ\text{C}$		500	nA
I_R	$V_R=125\text{V}, T_A=150^\circ\text{C}$		3.0	μA
I_R	$V_R=30\text{V}, T_A=125^\circ\text{C}$		300	nA
BV_R	$I_R=100\mu\text{A}$	150		V
V_F	$I_F=1.0\text{mA}$	0.54	0.69	V
V_F	$I_F=5.0\text{mA}$	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	$I_F=200\text{mA}$	0.834	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

CLL3595

SURFACE MOUNT
LOW LEAKAGE SILICON DIODE



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)

R4 (8-January 2010)

www.centralsemi.com