# CLL3595

# SURFACE MOUNT LOW LEAKAGE SILICON DIODE



www.centralsemi.com

# **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 <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	150	V
Peak Working Reverse Voltage	$V_{RWM}$	125	V
Average Forward Current	IO	150	mA
Forward Steady-State Current	I <sub>F</sub>	225	mA
Recurrent Peak Forward Current	i <sub>f</sub>	600	mA
Peak Forward Surge Current (1.0s pulse)	I <sub>FSM</sub>	500	mA
Peak Forward Surge Current (1.0µs pulse)	I <sub>FSM</sub>	4.0	Α
Power Dissipation	$P_{D}$	500	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +200	°C
Thermal Resistance	$\Theta_{JA}$	350	°C/W

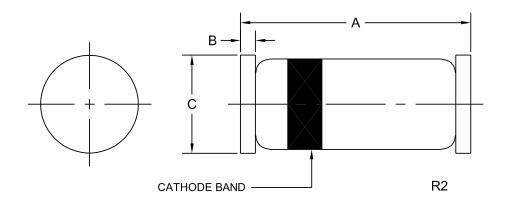
ELECTRICAL	CHARACTERISTICS: (T <sub>A</sub> =25°C ui	nless otherwise noted)		
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{R}$	V <sub>R</sub> =125V		1.0	nA
$I_{R}$	V <sub>R</sub> =125V, T <sub>A</sub> =125°C		500	nA
$I_{R}$	V <sub>R</sub> =125V, T <sub>A</sub> =150°C		3.0	μΑ
$I_{R}$	V <sub>R</sub> =30V, T <sub>A</sub> =125°C		300	nA
$BV_R$	I <sub>R</sub> =100μA	150		V
$V_{F}$	I <sub>F</sub> =1.0mA	0.54	0.69	V
$V_{F}$	I <sub>F</sub> =5.0mA	0.62	0.77	V
$V_{F}$	I <sub>F</sub> =10mA	0.65	0.80	V
$V_{F}$	I <sub>F</sub> =50mA	0.75	0.88	V
$V_{F}$	I <sub>F</sub> =100mA	0.79	0.92	V
$V_{F}$	I <sub>F</sub> =200mA	0.834	1.00	V
C <sub>T</sub>	$V_R=0$ , f=1.0MHz		8.0	pF
t <sub>rr</sub>	$V_R$ =3.5V, $I_f$ =10mA, $R_L$ =1.0k $\Omega$		3.0	μs

# CLL3595

# SURFACE MOUNT LOW LEAKAGE SILICON DIODE



# **SOD-80 CASE - MECHANICAL OUTLINE**



**MARKING: CATHODE BAND** 

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

SOD-80 (REV:R2)

## **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



## PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

## **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- · Special wafer diffusions
- · PbSn plating options
- Package details
- · Application notes
- · Application and design sample kits
- · Custom product and package development

#### **CONTACT US**

## Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110

Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms

www.centralsemi.com (000)