

# Central<sup>TM</sup> Semiconductor Corp.

145 Adams Ave., Hauppauge, NY 11788 USA

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Manufacturers of World Class Discrete Semiconductors

www.centrasemi.com

1N3595

SILICON LOW LEAKAGE DIODE

JEDEC DO-35 CASE

## DESCRIPTION

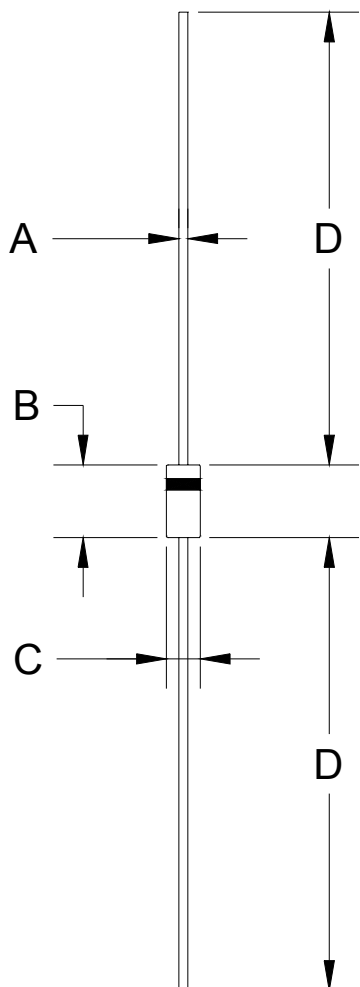
The CENTRAL SEMICONDUCTOR 1N3595 is an epitaxial planar silicon diode designed for low leakage, high conductance applications. Higher breakdown voltage devices are available on special order.

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

	<u>SYMBOL</u>		<u>UNITS</u>
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 $\mu$ 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	$^{\circ}\text{C}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
$I_R$	$V_R=125\text{V}$		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	$\mu\text{A}$
$I_R$	$V_R=30\text{V}, T_A=125^{\circ}\text{C}$		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
$V_F$	$I_F=200\text{mA}$	0.83	1.0	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	$\mu\text{s}$

JEDEC DO-35 CASE - MECHANICAL OUTLINE

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.018	0.022	0.46	0.56
B	0.120	0.200	3.05	5.08
C	0.060	0.090	1.52	2.29
D	1.000	-	25.40	-

DO-35 (REV: R0)

R1

Marking Code: C1N3595

R1

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## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### 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

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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