

1N4099C THRU 1N4135C

SILICON ZENER DIODE
LOW NOISE
6.8 VOLT THRU 100 VOLT
250mW, 2% TOLERANCE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N4099C series silicon Zener diode is designed for low leakage, low current, and low noise applications.



DO-35 CASE

MARKING: FULL PART NUMBER

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

Power Dissipation
Operating and Storage Junction Temperature

SYMBOL

P_D 250
 T_J, T_{stg} -65 to +200

UNITS

mW
 $^\circ\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$) $V_F=1.1\text{V MAX @ } I_F=200\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$I_R @ V_R$		I_{ZM}	$N_D @ 250\mu\text{A}$
	V	V	V	μA	Ω	μA	V	mA	$\mu\text{V}/\sqrt{\text{Hz}}$
1N4099C	6.664	6.8	6.936	250	200	10	5.2	35.0	40
1N4100C	7.350	7.5	7.650	250	200	10	5.7	31.8	40
1N4101C	8.036	8.2	8.364	250	200	1.0	6.3	29.0	40
1N4102C	8.526	8.7	8.874	250	200	1.0	6.7	27.4	40
1N4103C	8.918	9.1	9.282	250	200	1.0	7.0	26.2	40
1N4104C	9.80	10	10.20	250	200	1.0	7.6	24.8	40
1N4105C	10.78	11	11.22	250	200	0.05	8.5	21.6	40
1N4106C	11.76	12	12.24	250	200	0.05	9.2	20.4	40
1N4107C	12.74	13	13.26	250	200	0.05	9.9	19.0	40
1N4108C	13.72	14	14.28	250	200	0.05	10.7	17.5	40
1N4109C	14.70	15	15.30	250	100	0.05	11.4	16.3	40
1N4110C	15.68	16	16.32	250	100	0.05	12.2	15.4	40
1N4111C	16.66	17	17.34	250	100	0.05	13.0	14.5	40
1N4112C	17.64	18	18.36	250	100	0.05	13.7	13.2	40
1N4113C	18.62	19	19.38	250	150	0.05	14.5	12.5	40
1N4114C	19.60	20	20.40	250	150	0.01	15.2	11.9	40
1N4115C	21.56	22	22.44	250	150	0.01	16.8	10.8	40
1N4116C	23.52	24	24.48	250	150	0.01	18.3	9.9	40
1N4117C	24.50	25	25.50	250	150	0.01	19.0	9.5	40
1N4118C	26.46	27	27.54	250	150	0.01	20.5	8.8	40
1N4119C	27.44	28	28.56	250	200	0.01	21.3	8.5	40
1N4120C	29.40	30	30.60	250	200	0.01	22.8	7.9	40
1N4121C	32.34	33	33.66	250	200	0.01	25.1	7.2	40

R1 (4-February 2014)

1N4099C THRU 1N4135C

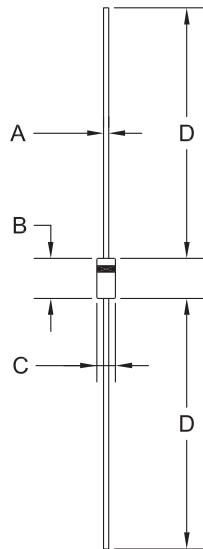
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$) $V_F=1.1\text{V MAX @ } I_F=200\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$I_R @ V_R$		I_{ZM}	$N_D @ 250\mu\text{A}$
	V	V	V	μA	Ω	μA	V	mA	$\mu\text{V}/\sqrt{\text{Hz}}$
1N4122C	35.28	36	36.72	250	200	0.01	27.4	6.6	40
1N4123C	38.22	39	39.78	250	200	0.01	29.7	6.1	40
1N4124C	42.14	43	43.86	250	250	0.01	32.7	5.5	40
1N4125C	46.06	47	47.94	250	250	0.01	35.8	5.1	40
1N4126C	49.98	51	52.02	250	300	0.01	38.8	4.6	40
1N4127C	54.88	56	57.12	250	300	0.01	42.6	4.2	40
1N4128C	58.80	60	61.20	250	400	0.01	45.6	4.0	40
1N4129C	60.76	62	63.24	250	500	0.01	47.1	3.8	40
1N4130C	66.64	68	69.36	250	700	0.01	51.7	3.5	40
1N4131C	73.50	75	76.50	250	700	0.01	57.0	3.1	40
1N4132C	80.36	82	83.64	250	800	0.01	62.4	2.9	40
1N4133C	85.26	87	88.74	250	1.0K	0.01	66.2	2.7	40
1N4134C	89.18	91	92.82	250	1.2K	0.01	69.2	2.6	40
1N4135C	98.00	100	102.0	250	1.5K	0.01	76.0	2.3	40

DO-35 CASE - MECHANICAL OUTLINE



R1

SYMBOL	DIMENSIONS			
	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: R1)

MARKING: FULL PART NUMBER

R1 (4-February 2014)

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 (2nd 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

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).

CONTACT US

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