1N4099 THRU 1N4135

SILICON ZENER DIODE
LOW NOISE
6.8 VOLT THRU 100 VOLT
250mW, 5% TOLERANCE



DO-35 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N4099 series silicon Zener diode is designed for low leakage, low current, and low noise applications.

MARKING: Devices shall either be marked with the prefix 'C' followed by the full part number or by the marking code in the Electrical Characteristics Table.

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Power Dissipation	P_D	250	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C) V_F=1.1V MAX @ I_F=200mA (for all types)

TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY	MARKING CODE
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	I_R	@ V_R	I_{ZM}	N_D @ 250μA	
	V	V	V	μA	Ω	μA	V	mA	μV/√Hz	
1N4099	6.460	6.8	7.140	250	200	10	5.2	35.0	40	C4099
1N4100	7.125	7.5	7.875	250	200	10	5.7	31.8	40	C4100
1N4101	7.790	8.2	8.610	250	200	1.0	6.3	29.0	40	C4101
1N4102	8.265	8.7	9.135	250	200	1.0	6.7	27.4	40	C4102
1N4103	8.645	9.1	9.555	250	200	1.0	7.0	26.2	40	C4103
1N4104	9.50	10	10.50	250	200	1.0	7.6	24.8	40	C4104
1N4105	10.45	11	11.55	250	200	0.05	8.5	21.6	40	C4105
1N4106	11.40	12	12.60	250	200	0.05	9.2	20.4	40	C4106
1N4107	12.35	13	13.65	250	200	0.05	9.9	19.0	40	C4107
1N4108	13.30	14	14.70	250	200	0.05	10.7	17.5	40	C4108
1N4109	14.25	15	15.75	250	100	0.05	11.4	16.3	40	C4109
1N4110	15.20	16	16.80	250	100	0.05	12.2	15.4	40	C4110
1N4111	16.15	17	17.85	250	100	0.05	13.0	14.5	40	C4111
1N4112	17.10	18	18.90	250	100	0.05	13.7	13.2	40	C4112
1N4113	18.05	19	19.95	250	150	0.05	14.5	12.5	40	C4113
1N4114	19.00	20	21.00	250	150	0.01	15.2	11.9	40	C4114
1N4115	20.90	22	23.10	250	150	0.01	16.8	10.8	40	C4115
1N4116	22.80	24	25.20	250	150	0.01	18.3	9.9	40	C4116
1N4117	23.75	25	26.25	250	150	0.01	19.0	9.5	40	C4117
1N4118	25.65	27	28.35	250	150	0.01	20.5	8.8	40	C4118
1N4119	26.60	28	29.40	250	200	0.01	21.3	8.5	40	C4119
1N4120	28.50	30	31.50	250	200	0.01	22.8	7.9	40	C4120
1N4121	31.35	33	34.65	250	200	0.01	25.1	7.2	40	C4121

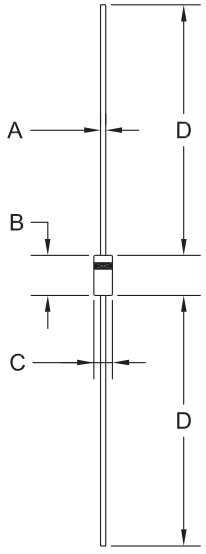
1N4099 THRU 1N4135

SILICON ZENER DIODE
LOW NOISE
6.8 VOLT THRU 100 VOLT
250mW, 5% TOLERANCE

ELECTRICAL CHARACTERISTICS - Continued: (T_A=25°C) V_F=1.1V MAX @ I_F=200mA (for all types)

TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM NOISE DENSITY	MARKING CODE
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	I_R @ V_R		I_{ZM}	N_D @ 250µA	
	V	V	V	µA	Ω	µA	V	mA	µV/√Hz	
1N4122	34.20	36	37.80	250	200	0.01	27.4	6.6	40	C4122
1N4123	37.05	39	40.95	250	200	0.01	29.7	6.1	40	C4123
1N4124	40.85	43	45.15	250	250	0.01	32.7	5.5	40	C4124
1N4125	44.65	47	49.35	250	250	0.01	35.8	5.1	40	C4125
1N4126	48.45	51	53.55	250	300	0.01	38.8	4.6	40	C4126
1N4127	53.20	56	58.80	250	300	0.01	42.6	4.2	40	C4127
1N4128	57.00	60	63.00	250	400	0.01	45.6	4.0	40	C4128
1N4129	58.90	62	65.10	250	500	0.01	47.1	3.8	40	C4129
1N4130	64.60	68	71.40	250	700	0.01	51.7	3.5	40	C4130
1N4131	71.25	75	78.75	250	700	0.01	57.0	3.1	40	C4131
1N4132	77.90	82	86.10	250	800	0.01	62.4	2.9	40	C4132
1N4133	82.65	87	91.35	250	1.0K	0.01	66.2	2.7	40	C4133
1N4134	86.45	91	95.55	250	1.2K	0.01	69.2	2.6	40	C4134
1N4135	95.00	100	105.0	250	1.5K	0.01	76.0	2.3	40	C4135

DO-35 CASE - MECHANICAL OUTLINE



R1

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R2 (6-December 2019)

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

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