

1N4728D THRU 1N4764D

SILICON ZENER DIODES
1.0 WATT, 3.3 THRU 100 VOLT
1% TOLERANCE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N4728D series silicon Zener diode is a highly reliable voltage regulator designed for use in industrial, commercial, entertainment and computer applications.

MARKING: FULL PART NUMBER



DO-41 CASE

MAXIMUM RATINGS:

Power Dissipation ($T_A=50^\circ\text{C}$)
Operating and Storage Temperature

SYMBOL

P_D
 T_J, T_{stg}

UNITS

W
 $^\circ\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$) $V_F=1.2\text{V MAX @ } I_F=200\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM DC CURRENT I_{ZM}	MAXIMUM TEMPERATURE COEFFICIENT θ_{VZ} @ I_{ZT}
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$				
	V	V	V		mA	Ω	Ω	mA	μA		
1N4728D	3.267	3.3	3.333	76	10	400	1.0	100	1.0	1380	-0.08 to -0.05
1N4729D	3.564	3.6	3.636	69	10	400	1.0	100	1.0	1260	-0.08 to -0.05
1N4730D	3.861	3.9	3.939	64	9.0	400	1.0	50	1.0	1190	-0.07 to -0.02
1N4731D	4.257	4.3	4.343	58	9.0	400	1.0	10	1.0	1070	-0.07 to -0.01
1N4732D	4.653	4.7	4.747	53	8.0	500	1.0	10	1.0	970	-0.03 to +0.04
1N4733D	5.049	5.1	5.151	49	7.0	550	1.0	10	1.0	890	-0.01 to +0.04
1N4734D	5.544	5.6	5.656	45	5.0	600	1.0	10	2.0	810	0 to +0.045
1N4735D	6.138	6.2	6.262	41	2.0	700	1.0	10	3.0	730	+0.01 to +0.055
1N4736D	6.732	6.8	6.868	37	3.5	700	1.0	10	4.0	660	+0.015 to +0.06
1N4737D	7.425	7.5	7.575	34	4.0	700	0.5	10	5.0	605	+0.02 to +0.065
1N4738D	8.118	8.2	8.282	31	4.5	700	0.5	10	6.0	550	+0.03 to +0.07
1N4739D	9.009	9.1	9.191	28	5.0	700	0.5	10	7.0	500	+0.035 to +0.075
1N4740D	9.900	10	10.10	25	7.0	700	0.25	10	7.6	454	+0.04 to +0.08
1N4741D	10.89	11	11.11	23	8.0	700	0.25	5.0	8.4	414	+0.045 to +0.08
1N4742D	11.88	12	12.12	21	9.0	700	0.25	5.0	9.1	380	+0.045 to +0.085
1N4743D	12.87	13	13.13	19	10	700	0.25	5.0	9.9	344	+0.05 to +0.085
1N4744D	14.85	15	15.15	17	14	700	0.25	5.0	11.4	304	+0.055 to +0.09
1N4745D	15.84	16	16.16	15.5	16	700	0.25	5.0	12.2	285	+0.055 to +0.09
1N4746D	17.82	18	18.18	14	20	750	0.25	5.0	13.7	250	+0.06 to +0.09
1N4747D	19.80	20	20.20	12.5	22	750	0.25	5.0	15.2	225	+0.06 to +0.09
1N4748D	21.78	22	22.22	11.5	23	750	0.25	5.0	16.7	205	+0.06 to +0.095
1N4749D	23.76	24	24.24	10.5	25	750	0.25	5.0	18.2	190	+0.06 to +0.095
1N4750D	26.73	27	27.27	9.5	35	750	0.25	5.0	20.6	170	+0.06 to +0.095

R0 (7-January 2014)

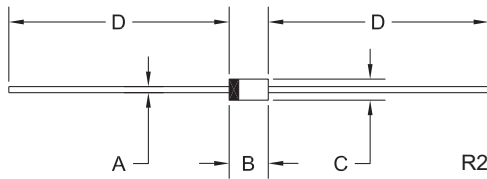
1N4728D THRU 1N4764D
SILICON ZENER DIODES
1.0 WATT, 3.3 THRU 100 VOLT
1% TOLERANCE



ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$) $V_F=1.2\text{V MAX @ } I_F=200\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT I_{ZT} mA	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM DC CURRENT I_{ZM} mA	MAXIMUM TEMPERATURE COEFFICIENT @ I_{ZT} $\frac{\partial V_Z}{\partial T}$ %/°C
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$ Ω	$Z_{ZK} @ I_{ZK}$ Ω	$I_R @ V_R$ μA	V_R V			
	V	V	V								
1N4751D	29.70	30	30.30	8.5	40	1.0K	0.25	5.0	22.8	150	+0.06 to +0.095
1N4752D	32.67	33	33.33	7.5	45	1.0K	0.25	5.0	25.1	135	+0.06 to +0.095
1N4753D	35.64	36	36.36	7.0	50	1.0K	0.25	5.0	27.4	125	+0.06 to +0.095
1N4754D	38.61	39	39.39	6.5	60	1.0K	0.25	5.0	29.7	115	+0.06 to +0.095
1N4755D	42.57	43	43.43	6.0	70	1.5K	0.25	5.0	32.7	110	+0.06 to +0.095
1N4756D	46.53	47	47.47	5.5	80	1.5K	0.25	5.0	35.8	95	+0.06 to +0.095
1N4757D	50.49	51	51.51	5.0	95	1.5K	0.25	5.0	38.8	90	+0.06 to +0.095
1N4758D	55.44	56	56.56	4.5	110	2.0K	0.25	5.0	42.6	80	+0.06 to +0.095
1N4759D	61.38	62	62.62	4.0	125	2.0K	0.25	5.0	47.1	70	+0.06 to +0.095
1N4760D	67.32	68	68.68	3.7	150	2.0K	0.25	5.0	51.7	65	+0.06 to +0.095
1N4761D	74.25	75	75.75	3.3	175	2.0K	0.25	5.0	56.0	60	+0.06 to +0.095
1N4762D	81.18	82	82.82	3.0	200	3.0K	0.25	5.0	62.2	55	+0.06 to +0.095
1N4763D	90.09	91	91.91	2.8	250	3.0K	0.25	5.0	69.2	50	+0.06 to +0.095
1N4764D	99.00	100	101.0	2.5	350	3.0K	0.25	5.0	76.0	45	+0.06 to +0.095

DO-41 CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.026	0.034	0.65	0.86
B	0.138	0.205	3.50	5.21
C	0.079	0.107	2.00	2.72
D	1.000	-	25.40	-

DO-41 (REV: R2)

R0 (7-January 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

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.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.centrasemi.com/terms