

1N4728C THRU 1N4764C

SILICON ZENER DIODES
1.0 WATT, 3.3 THRU 100 VOLT
2% TOLERANCE

**DO-41 CASE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 1N4728C series silicon Zener diode is a highly reliable voltage regulator designed for use in industrial, commercial, entertainment and computer applications.

MARKING: FULL PART NUMBER**MAXIMUM RATINGS:**Power Dissipation ($T_A=50^\circ\text{C}$)

Operating and Storage Temperature

SYMBOL P_D T_J, T_{stg}

1.0

-65 to +200

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	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM DC CURRENT	MAXIMUM TEMPERATURE COEFFICIENT @ I_{ZT}
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		I_{ZM}	ΘV_Z
	V	V	V	mA	Ω	Ω	mA	μA	V	mA	% / $^\circ\text{C}$
1N4728C	3.234	3.3	3.366	76	10	400	1.0	100	1.0	1380	-0.08 to -0.05
1N4729C	3.528	3.6	3.672	69	10	400	1.0	100	1.0	1260	-0.08 to -0.05
1N4730C	3.822	3.9	3.978	64	9.0	400	1.0	50	1.0	1190	-0.07 to -0.02
1N4731C	4.214	4.3	4.386	58	9.0	400	1.0	10	1.0	1070	-0.07 to -0.01
1N4732C	4.606	4.7	4.794	53	8.0	500	1.0	10	1.0	970	-0.03 to +0.04
1N4733C	4.998	5.1	5.202	49	7.0	550	1.0	10	1.0	890	-0.01 to +0.04
1N4734C	5.488	5.6	5.712	45	5.0	600	1.0	10	2.0	810	0 to +0.045
1N4735C	6.076	6.2	6.324	41	2.0	700	1.0	10	3.0	730	+0.01 to +0.055
1N4736C	6.664	6.8	6.936	37	3.5	700	1.0	10	4.0	660	+0.015 to +0.06
1N4737C	7.350	7.5	7.650	34	4.0	700	0.5	10	5.0	605	+0.02 to +0.065
1N4738C	8.036	8.2	8.364	31	4.5	700	0.5	10	6.0	550	+0.03 to +0.07
1N4739C	8.918	9.1	9.282	28	5.0	700	0.5	10	7.0	500	+0.035 to +0.075
1N4740C	9.800	10	10.20	25	7.0	700	0.25	10	7.6	454	+0.04 to +0.08
1N4741C	10.78	11	11.22	23	8.0	700	0.25	5.0	8.4	414	+0.045 to +0.08
1N4742C	11.76	12	12.24	21	9.0	700	0.25	5.0	9.1	380	+0.045 to +0.085
1N4743C	12.74	13	13.26	19	10	700	0.25	5.0	9.9	344	+0.05 to +0.085
1N4744C	14.70	15	15.30	17	14	700	0.25	5.0	11.4	304	+0.055 to +0.09
1N4745C	15.68	16	16.32	15.5	16	700	0.25	5.0	12.2	285	+0.055 to +0.09
1N4746C	17.64	18	18.36	14	20	750	0.25	5.0	13.7	250	+0.06 to +0.09
1N4747C	19.60	20	20.40	12.5	22	750	0.25	5.0	15.2	225	+0.06 to +0.09
1N4748C	21.56	22	22.44	11.5	23	750	0.25	5.0	16.7	205	+0.06 to +0.095
1N4749C	23.52	24	24.48	10.5	25	750	0.25	5.0	18.2	190	+0.06 to +0.095
1N4750C	26.46	27	27.54	9.5	35	750	0.25	5.0	20.6	170	+0.06 to +0.095

R0 (7-January 2014)

1N4728C THRU 1N4764C

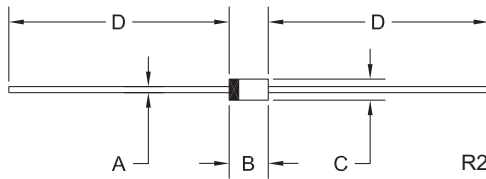
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^{\circ}\text{C}$) $V_F=1.2\text{V MAX @ } I_F=200\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM DC CURRENT	MAXIMUM TEMPERATURE COEFFICIENT @ I_{ZT}
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		I_{ZM}	θV_Z
	V	V	V	mA	Ω	Ω	mA	μA	V	mA	% / $^{\circ}\text{C}$
1N4751C	29.40	30	30.60	8.5	40	1.0K	0.25	5.0	22.8	150	+0.06 to +0.095
1N4752C	32.34	33	33.66	7.5	45	1.0K	0.25	5.0	25.1	135	+0.06 to +0.095
1N4753C	35.28	36	36.72	7.0	50	1.0K	0.25	5.0	27.4	125	+0.06 to +0.095
1N4754C	38.22	39	39.78	6.5	60	1.0K	0.25	5.0	29.7	115	+0.06 to +0.095
1N4755C	42.14	43	43.86	6.0	70	1.5K	0.25	5.0	32.7	110	+0.06 to +0.095
1N4756C	46.06	47	47.94	5.5	80	1.5K	0.25	5.0	35.8	95	+0.06 to +0.095
1N4757C	49.98	51	52.02	5.0	95	1.5K	0.25	5.0	38.8	90	+0.06 to +0.095
1N4758C	54.88	56	57.12	4.5	110	2.0K	0.25	5.0	42.6	80	+0.06 to +0.095
1N4759C	60.76	62	63.24	4.0	125	2.0K	0.25	5.0	47.1	70	+0.06 to +0.095
1N4760C	66.64	68	69.36	3.7	150	2.0K	0.25	5.0	51.7	65	+0.06 to +0.095
1N4761C	73.50	75	76.50	3.3	175	2.0K	0.25	5.0	56.0	60	+0.06 to +0.095
1N4762C	80.36	82	83.64	3.0	200	3.0K	0.25	5.0	62.2	55	+0.06 to +0.095
1N4763C	89.18	91	92.82	2.8	250	3.0K	0.25	5.0	69.2	50	+0.06 to +0.095
1N4764C	98.00	100	102.0	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

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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



<http://www.centrasemi.com>

Product End of Life Notification

PDN ID:	PDN01045
Notification Date:	8/19/16
Last Buy Date:	2/19/17
Last Shipment Date	8/19/17

Summary: The 1N4728A, 1N4729A, 1N4730A, and 1N4731A, 1 watt Zener diodes in the DO-41 case are discontinued and now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

Central Part Number	Replacement
1N4728A BK	N/A
1N4728A TR	N/A
1N4729A BK	N/A
1N4729A TR	N/A
1N4730A BK	N/A
1N4730A TR	N/A
1N4730C BK	N/A
1N4731A BK	N/A
1N4731A TR	N/A

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centrasemi.com.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.