

**1N4728A THRU 1N4764A**

**SILICON ZENER DIODES  
1.0 WATT, 3.3 THRU 100 VOLT  
5% TOLERANCE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 1N4728A 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 $\theta_{VZ}$ @ $I_{ZT}$
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$				
	V	V	V		mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$		
1N4728A	3.135	3.3	3.465	76	10	400	1.0	100	1.0	1380	-0.08 to -0.05
1N4729A	3.420	3.6	3.780	69	10	400	1.0	100	1.0	1260	-0.08 to -0.05
1N4730A	3.705	3.9	4.095	64	9.0	400	1.0	50	1.0	1190	-0.07 to -0.02
1N4731A	4.085	4.3	4.515	58	9.0	400	1.0	10	1.0	1070	-0.07 to -0.01
1N4732A	4.465	4.7	4.935	53	8.0	500	1.0	10	1.0	970	-0.03 to +0.04
1N4733A	4.845	5.1	5.355	49	7.0	550	1.0	10	1.0	890	-0.01 to +0.04
1N4734A	5.320	5.6	5.880	45	5.0	600	1.0	10	2.0	810	0 to +0.045
1N4735A	5.890	6.2	6.510	41	2.0	700	1.0	10	3.0	730	+0.01 to +0.055
1N4736A	6.460	6.8	7.140	37	3.5	700	1.0	10	4.0	660	+0.015 to +0.06
1N4737A	7.125	7.5	7.875	34	4.0	700	0.5	10	5.0	605	+0.02 to +0.065
1N4738A	7.790	8.2	8.610	31	4.5	700	0.5	10	6.0	550	+0.03 to +0.07
1N4739A	8.645	9.1	9.555	28	5.0	700	0.5	10	7.0	500	+0.035 to +0.075
1N4740A	9.500	10	10.50	25	7.0	700	0.25	10	7.6	454	+0.04 to +0.08
1N4741A	10.45	11	11.55	23	8.0	700	0.25	5.0	8.4	414	+0.045 to +0.08
1N4742A	11.40	12	12.60	21	9.0	700	0.25	5.0	9.1	380	+0.045 to +0.085
1N4743A	12.35	13	13.65	19	10	700	0.25	5.0	9.9	344	+0.05 to +0.085
1N4744A	14.25	15	15.75	17	14	700	0.25	5.0	11.4	304	+0.055 to +0.09
1N4745A	15.20	16	16.80	15.5	16	700	0.25	5.0	12.2	285	+0.055 to +0.09
1N4746A	17.10	18	18.90	14	20	750	0.25	5.0	13.7	250	+0.06 to +0.09
1N4747A	19.00	20	21.00	12.5	22	750	0.25	5.0	15.2	225	+0.06 to +0.09
1N4748A	20.90	22	23.10	11.5	23	750	0.25	5.0	16.7	205	+0.06 to +0.095
1N4749A	22.80	24	25.20	10.5	25	750	0.25	5.0	18.2	190	+0.06 to +0.095
1N4750A	25.65	27	28.35	9.5	35	750	0.25	5.0	20.6	170	+0.06 to +0.095

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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 $I_{ZT}$	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM DC CURRENT $I_{ZM}$	MAXIMUM TEMPERATURE COEFFICIENT @ $I_{ZT}$ $\theta_{VZ}$
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$				
	V	V	V	$\Omega$	$\Omega$	$\mu\text{A}$	V	mA	% / $^\circ\text{C}$		
1N4751A	28.50	30	31.50	8.5	40	1.0K	0.25	5.0	22.8	150	+0.06 to +0.095
1N4752A	31.35	33	34.65	7.5	45	1.0K	0.25	5.0	25.1	135	+0.06 to +0.095
1N4753A	34.20	36	37.80	7.0	50	1.0K	0.25	5.0	27.4	125	+0.06 to +0.095
1N4754A	37.05	39	40.95	6.5	60	1.0K	0.25	5.0	29.7	115	+0.06 to +0.095
1N4755A	40.85	43	45.15	6.0	70	1.5K	0.25	5.0	32.7	110	+0.06 to +0.095
1N4756A	44.65	47	49.35	5.5	80	1.5K	0.25	5.0	35.8	95	+0.06 to +0.095
1N4757A	48.45	51	53.55	5.0	95	1.5K	0.25	5.0	38.8	90	+0.06 to +0.095
1N4758A	53.20	56	58.80	4.5	110	2.0K	0.25	5.0	42.6	80	+0.06 to +0.095
1N4759A	58.90	62	65.10	4.0	125	2.0K	0.25	5.0	47.1	70	+0.06 to +0.095
1N4760A	64.60	68	71.40	3.7	150	2.0K	0.25	5.0	51.7	65	+0.06 to +0.095
1N4761A	71.25	75	78.75	3.3	175	2.0K	0.25	5.0	56.0	60	+0.06 to +0.095
1N4762A	77.90	82	86.10	3.0	200	3.0K	0.25	5.0	62.2	55	+0.06 to +0.095
1N4763A	86.45	91	95.55	2.8	250	3.0K	0.25	5.0	69.2	50	+0.06 to +0.095
1N4764A	95.00	100	105.0	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)

R2 (14-October 2013)

## 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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**Worldwide Field Representatives:**  
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**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

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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/terms)



<http://www.centrasemi.com>

# Product End of Life Notification

<b>PDN ID:</b>	PDN01045
<b>Notification Date:</b>	8/19/16
<b>Last Buy Date:</b>	2/19/17
<b>Last Shipment Date</b>	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.

<b>Central Part Number</b>	<b>Replacement</b>
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](mailto: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.

# Product End of Life Notification

<b>PDN ID:</b>	PDN01010 Rev:001
<b>Notification Date:</b>	2/15/19
<b>Last Buy Date:</b>	5/02/16
<b>Last Shipment Date</b>	11/02/16

Summary: 1 watt, high voltage (75V thru 100V), glass body Zener diodes manufactured in the DO-41 and MELF packages are discontinued and now classified as End of Life (EOL). Rev:001 of PDN#010010, February 15, 2019, is being issued to add 1N4761A omitted from the original PDN.

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other 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 ongoing Product Management Process. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

<u>Central Part Number</u>	<u>Replacement</u>
CLL4762A BK	N/A, Stock Only
CLL4762A TR	N/A, Stock Only
CLL4762C BK	N/A, Stock Only
CLL4762C TR	N/A, Stock Only
CLL4763A BK	N/A, Stock Only
CLL4763A TR	N/A, Stock Only
CLL4764 TR	N/A, Stock Only
CLL4764A BK	N/A, Stock Only
CLL4764A TR	N/A, Stock Only
1N4761A BK	N/A, Stock Only
1N4761A TR	N/A, Stock Only
1N4762A BK	N/A, Stock Only
1N4762A TR	N/A, Stock Only
1N4763A BK	N/A, Stock Only
1N4763A TR	N/A, Stock Only
1N4764 BK	N/A, Stock Only
1N4764 TR	N/A, Stock Only
1N4764A BK	N/A, Stock Only
1N4764A TR	N/A, Stock Only

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