

# CLL4728A THRU CLL4764A

## SURFACE MOUNT SILICON ZENER DIODE 1 WATT, 3.3 THRU 100 VOLTS



MELF CASE

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

Power Dissipation

Operating and Storage Junction Temperature

$V_Z$  Tolerance: Part number with "A" suffix

$V_Z$  Tolerance: Part number with "C" suffix

$V_Z$  Tolerance: Part number with "D" suffix



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### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CLL4728A Series Silicon Zener Diode is a high quality voltage regulator for use in surface mount industrial, commercial, entertainment and computer applications.

### MARKING: CATHODE BAND

### SYMBOL

$P_D$   
 $T_J, T_{stg}$

1.0  
-65 to +200  
 $\pm 5$   
 $\pm 2$   
 $\pm 1$

### UNITS

W  
 $^{\circ}\text{C}$   
%  
%  
%

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

TYPE	ZENER VOLTAGE	TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM CURRENT
	$V_Z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		$I_{ZM}$
	V	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	mA
CLL4728A	3.3	76	10	400	1.0	100	1.0	1380
CLL4729A	3.6	69	10	400	1.0	100	1.0	1260
CLL4730A	3.9	64	9.0	400	1.0	50	1.0	1190
CLL4731A	4.3	58	9.0	400	1.0	10	1.0	1070
CLL4732A	4.7	53	8.0	500	1.0	10	1.0	970
CLL4733A	5.1	49	7.0	550	1.0	10	1.0	890
CLL4734A	5.6	45	5.0	600	1.0	10	2.0	810
CLL4735A	6.2	41	2.0	700	1.0	10	3.0	730
CLL4736A	6.8	37	3.5	700	1.0	10	4.0	660
CLL4737A	7.5	34	4.0	700	0.5	10	5.0	605
CLL4738A	8.2	31	4.5	700	0.5	10	6.0	550
CLL4739A	9.1	28	5.0	700	0.5	10	7.0	500
CLL4740A	10	25	7.0	700	0.25	10	7.6	454
CLL4741A	11	23	8.0	700	0.25	5.0	8.4	414
CLL4742A	12	21	9.0	700	0.25	5.0	9.1	380
CLL4743A	13	19	10	700	0.25	5.0	9.9	344
CLL4744A	15	17	14	700	0.25	5.0	11.4	304
CLL4745A	16	15.5	16	700	0.25	5.0	12.2	285
CLL4746A	18	14	20	750	0.25	5.0	13.7	250
CLL4747A	20	12.5	22	750	0.25	5.0	15.2	225
CLL4748A	22	11.5	23	750	0.25	5.0	16.7	205
CLL4749A	24	10.5	25	750	0.25	5.0	18.2	190
CLL4750A	27	9.5	35	750	0.25	5.0	20.6	170
CLL4751A	30	8.5	40	1000	0.25	5.0	22.8	150

R4 (21-April 2010)

CLL4728A THRU CLL4764A

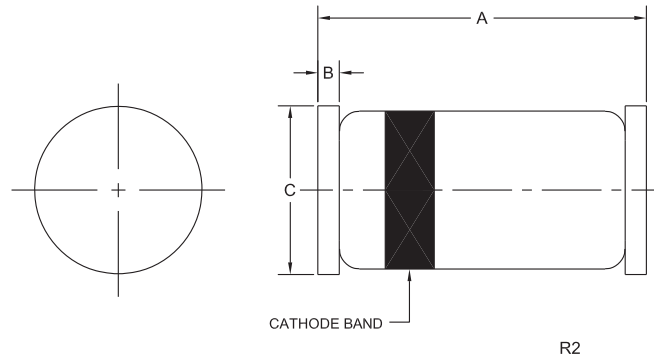
**SURFACE MOUNT  
SILICON ZENER DIODE  
1 WATT, 3.3 THRU 100 VOLTS**



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

TYPE	ZENER VOLTAGE	TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM CURRENT
	$V_Z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		$I_{ZM}$
	V	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	mA
CLL4752A	33	7.5	45	1000	0.25	5.0	25.1	135
CLL4753A	36	7.0	50	1000	0.25	5.0	27.4	125
CLL4754A	39	6.5	60	1000	0.25	5.0	29.7	115
CLL4755A	43	6.0	70	1500	0.25	5.0	32.7	110
CLL4756A	47	5.5	80	1500	0.25	5.0	35.8	95
CLL4757A	51	5.0	95	1500	0.25	5.0	38.8	90
CLL4758A	56	4.5	110	2000	0.25	5.0	42.6	80
CLL4759A	62	4.0	125	2000	0.25	5.0	47.1	70
CLL4760A	68	3.7	150	2000	0.25	5.0	51.7	65
CLL4761A	75	3.3	175	2000	0.25	5.0	56	60
CLL4762A	82	3.0	200	3000	0.25	5.0	62.2	55
CLL4763A	91	2.8	250	3000	0.25	5.0	69.2	50
CLL4764A	100	2.5	350	3000	0.25	5.0	76	45

#### MELF CASE - MECHANICAL OUTLINE



**MARKING: CATHODE BAND**

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.185	0.217	4.70	5.50
B	0.012	0.022	0.30	0.56
C (DIA)	0.094	0.110	2.40	2.80

MELF (REV:R2)

R4 (21-April 2010)

## 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

Central Semiconductor Corp.  
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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)

# Product End of Life Notification

<b>PDN ID:</b>	PDN01083
<b>Notification Date:</b>	5/31/18
<b>Last Buy Date:</b>	11/30/18
<b>Last Shipment Date</b>	5/31/19

Summary: All extreme low and high voltage Zener diodes in the MELF package 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 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>
CLL4728A BK	N/A
CLL4728A TR	N/A
CLL4729A BK	N/A
CLL4729A TR	N/A
CLL4729C BK	N/A
CLL4729C TR	N/A
CLL4730A BK	N/A
CLL4730A TR	N/A
CLL4731A BK	N/A
CLL4731A TR	N/A
CLL4732A BK	N/A
CLL4732A TR	N/A
CLL4733A BK	N/A
CLL4733A TR	N/A
CLL4733D TR	N/A
CLL4734A BK	N/A
CLL4734A TR	N/A
CLL4735A BK	N/A
CLL4735A TR	N/A
CLL4735D BK	N/A
CLL4735D TR	N/A
CLL4755A BK	N/A
CLL4755A TR	N/A
CLL4756A BK	N/A
CLL4756A TR	N/A
CLL4757A BK	N/A
CLL4757A TR	N/A
CLL4758A BK	N/A
CLL4758A TR	N/A
CLL4759A BK	N/A
CLL4759A TR	N/A
CLL4760A BK	N/A
CLL4760A TR	N/A
CLL4761A BK	N/A
CLL4761A TR	N/A

\*\*\* CONTINUED \*\*\*

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.



<http://www.centrasemi.com>

## Product End of Life Notification

<b>PDN ID:</b>	PDN01083
<b>Notification Date:</b>	5/31/18
<b>Last Buy Date:</b>	11/30/18
<b>Last Shipment Date</b>	5/31/19

\*\*\* CONTINUED FROM PRIOR PAGE \*\*\*

**Central Part Number**      **Replacement**

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).

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# 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

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).

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[CLL4743A TR TIN/LEAD](#) [CLL4748A TR TIN/LEAD](#)