

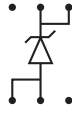
CMKTC825A  
CMKTC825E

**SURFACE MOUNT  
TEMPERATURE COMPENSATED  
SILICON ZENER DIODE**



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

ULTRAmulti™



**SOT-363 CASE**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKTC825A and CMKTC825E are 6.2 volt, temperature compensated Zener reference diodes. These devices are ideal for applications requiring long term voltage stability over the specified temperature range.

**CMKTC825A MARKING CODE: CT25  
CMKTC825E MARKING CODE: C25E**

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

Power Dissipation  
Operating and Storage Junction Temperature  
Tolerance

| SYMBOL         |             | UNITS            |
|----------------|-------------|------------------|
| $P_D$          | 325         | mW               |
| $T_J, T_{stg}$ | -65 to +150 | $^\circ\text{C}$ |
|                | $\pm 5$     | %                |

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

| SYMBOL         | TEST CONDITIONS                | MIN  | NOM  | MAX  | UNITS    |
|----------------|--------------------------------|------|------|------|----------|
| $V_Z$          | $I_Z=7.5\text{mA}$             | 5.89 | 6.20 | 6.51 | V        |
| $Z_Z$          | $I_Z=7.5\text{mA}$             |      |      | 20   | $\Omega$ |
| $\Delta V_Z^*$ | $I_Z=7.5\text{mA}$ (CMKTC825A) |      |      | 44   | mV       |
| $\Delta V_Z^*$ | $I_Z=7.5\text{mA}$ (CMKTC825E) |      |      | 20   | mV       |

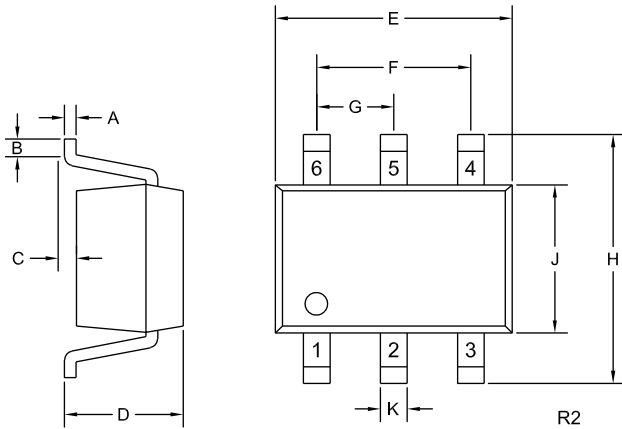
\* The maximum allowable voltage change observed at the specified temperatures of  $-55^\circ\text{C}$ ,  $0^\circ\text{C}$ ,  $25^\circ\text{C}$ ,  $75^\circ\text{C}$ , and  $100^\circ\text{C}$

CMKTC825A  
CMKTC825E

SURFACE MOUNT  
TEMPERATURE COMPENSATED  
SILICON ZENER DIODE



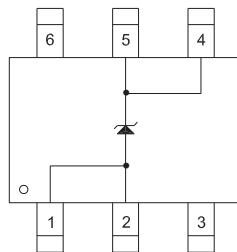
SOT-363 CASE - MECHANICAL OUTLINE



| SYMBOL | INCHES |       | MILLIMETERS |      |
|--------|--------|-------|-------------|------|
|        | MIN    | MAX   | MIN         | MAX  |
| A      | 0.004  | 0.010 | 0.10        | 0.25 |
| B      | 0.005  | -     | 0.12        | -    |
| C      | 0.000  | 0.004 | 0.00        | 0.10 |
| D      | 0.031  | 0.043 | 0.80        | 1.10 |
| E      | 0.071  | 0.087 | 1.80        | 2.20 |
| F      | 0.051  |       | 1.30        |      |
| G      | 0.026  |       | 0.65        |      |
| H      | 0.075  | 0.091 | 1.90        | 2.30 |
| J      | 0.043  | 0.055 | 1.10        | 1.40 |
| K      | 0.006  | 0.012 | 0.15        | 0.30 |

SOT-363 (REV: R2)

PIN CONFIGURATION



LEAD CODE:

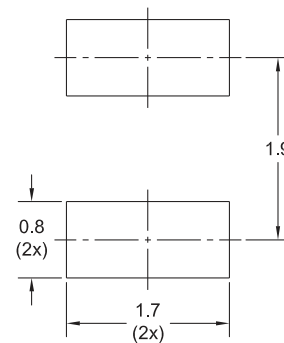
- 1) Anode
- 2) Anode
- 3) NC
- 4) Cathode
- 5) Cathode
- 6) NC

MARKING CODES:

CMKTC825A: CT25  
CMKTC825E: C25E

SUGGESTED MOUNTING PADS

(Dimensions in mm)



R5 (13-January 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

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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>            | PDN01196 |
| <b>Notification Date:</b> | 11/04/21 |
| <b>Last Buy Date:</b>     | 5/04/22  |
| <b>Last Shipment Date</b> | 11/04/22 |

Summary: The following diodes in the SOT-323 package are discontinued and now classified as of 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.

**\* All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

| <u>Central Part Number</u> | <u>Suggested Replacement</u> |
|----------------------------|------------------------------|
| CMKSH2-4LR TR              | N/A                          |
| CMKTC825A 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. If you would like assistance, please visit <https://my.centrasemi.com/submit-inquiry?type=ER> to submit an online inquiry.

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>            | PDN01028 |
| <b>Notification Date:</b> | 6/23/16  |
| <b>Last Buy Date:</b>     | 12/23/16 |
| <b>Last Shipment Date</b> | 6/23/17  |

Summary: The CMKTC825E temperature compensated Zener diode has been discontinued and is 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.

| <u>Central Part Number</u> | <u>Replacement</u> |
|----------------------------|--------------------|
| CMKTC825E BK               | CMKTC825A BK H     |
| CMKTC825E TR               | CMKTC825A TR H     |

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.