

# Central<sup>TM</sup> Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA  
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

1N4001 SERIES

1.0 AMP SILICON RECTIFIER  
50 THRU 1000 VOLTS

JEDEC DO-41 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N4001 Series types are 1.0 Amp Silicon Rectifiers which are high quality, well constructed, highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

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

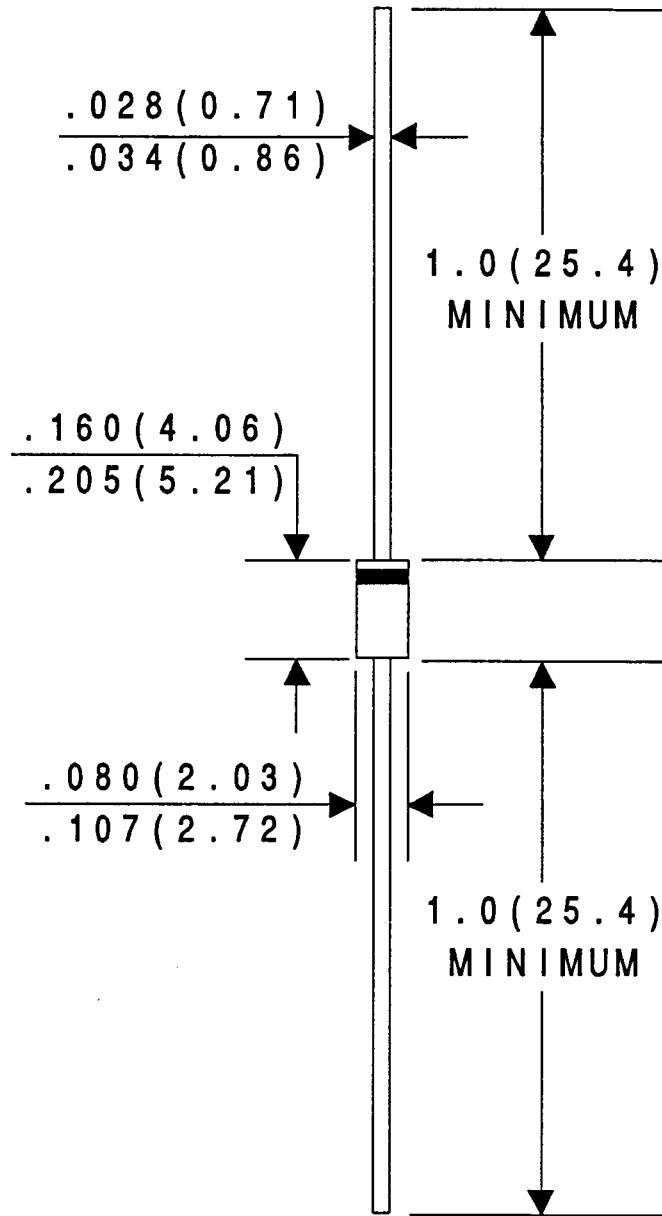
|                                                       | SYMBOL         | 1N<br>4001 | 1N<br>4002 | 1N<br>4003 | 1N<br>4004  | 1N<br>4005 | 1N<br>4006 | 1N<br>4007 | UNITS              |
|-------------------------------------------------------|----------------|------------|------------|------------|-------------|------------|------------|------------|--------------------|
| Peak Repetitive Reverse Voltage                       | $V_{RRM}$      | 50         | 100        | 200        | 400         | 600        | 800        | 1000       | V                  |
| DC Blocking Voltage                                   | $V_R$          | 50         | 100        | 200        | 400         | 600        | 800        | 1000       | V                  |
| RMS Reverse Voltage                                   | $V_{R(RMS)}$   | 35         | 70         | 140        | 280         | 420        | 560        | 700        | V                  |
| Average Forward Current<br>@ $T_A = 75^\circ\text{C}$ | $I_O$          |            |            |            | 1.0         |            |            |            | A                  |
| Peak Forward Surge Current                            | $I_{FSM}$      |            |            |            | 50          |            |            |            | A                  |
| Operating and Storage<br>Junction Temperature         | $T_J, T_{stg}$ |            |            |            | -65 to +175 |            |            |            | $^\circ\text{C}$   |
| Thermal Resistance                                    | $\theta_{JA}$  |            |            |            | 26          |            |            |            | $^\circ\text{C/W}$ |

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

| SYMBOL | TEST CONDITIONS                                        | MIN | MAX | UNITS         |
|--------|--------------------------------------------------------|-----|-----|---------------|
| $I_R$  | $V_R = \text{Rated } V_{RRM}$                          |     | 5.0 | $\mu\text{A}$ |
| $I_R$  | $V_R = \text{Rated } V_{RRM}, T_A = 100^\circ\text{C}$ |     | 50  | $\mu\text{A}$ |
| $V_F$  | $I_F = 1.0\text{A}$                                    |     | 1.1 | V             |

(SEE REVERSE FOR OUTLINE DRAWING)

JEDEC DO-41 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

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

**Worldwide Field Representatives:**  
[www.centrasemi.com/wwreps](http://www.centrasemi.com/wwreps)

**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)

# Product End of Life Notification

|                           |                  |
|---------------------------|------------------|
| <b>PDN ID:</b>            | PDN01027 Rev:001 |
| <b>Notification Date:</b> | 8/11/16          |
| <b>Last Buy Date:</b>     | 12/14/16         |
| <b>Last Shipment Date</b> | 6/14/17          |

Summary: The 1N4001 series of 1 amp silicon rectifiers, with the exception of part # 1N4007 BK/TR, was discontinued on June 14, 2016, and is now classified as End of Life (EOL). Rev:001 of PDN#01027, August 9, 2016, is being issued to add devices omitted from the original PDN in error. Central apologizes for any inconvenience.

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> |
|----------------------------|--------------------|
| 1N4001 BK                  | 1N4007 BK          |
| 1N4001 TR                  | 1N4007 TR          |
| 1N4001G BK                 | 1N4007 BK          |
| 1N4002 BK                  | 1N4007 BK          |
| 1N4002 TR                  | 1N4007 TR          |
| 1N4002G BK                 | 1N4007 BK          |
| 1N4002GL TR                | 1N4007 TR          |
| 1N4002SP BK                | 1N4007 BK          |
| 1N4002SP TR                | 1N4007 TR          |
| 1N4003 BK                  | 1N4007 BK          |
| 1N4003 TR                  | 1N4007 TR          |
| 1N4003G BK                 | 1N4007 BK          |
| 1N4003GL TR                | 1N4007 TR          |
| 1N4004 BK                  | 1N4007 BK          |
| 1N4004 TR                  | 1N4007 TR          |
| 1N4004G BK                 | 1N4007 BK          |
| 1N4004GPP BK               | 1N4007 BK          |
| 1N4004GPP TR               | 1N4007 TR          |
| 1N4004SP AP-RPCU           | 1N4007 TR          |
| 1N4004SP TR                | 1N4007 TR          |
| 1N4004SP TR-RPCU           | 1N4007 TR          |
| 1N4005 BK                  | 1N4007 BK          |
| 1N4005 TR                  | 1N4007 TR          |
| 1N4005G BK                 | 1N4007 BK          |
| 1N4005GL BK                | 1N4007 BK          |
| 1N4005GL TR                | 1N4007 TR          |
| 1N4005GPP BK               | 1N4007 BK          |
| 1N4005GPP TR               | 1N4007 TR          |
| 1N4006 BK                  | 1N4007 BK          |
| 1N4006 TR                  | 1N4007 TR          |
| 1N4006G BK                 | 1N4007 BK          |
| 1N4007GPP BK               | 1N4007 BK          |
| 1N4007GPP TR               | 1N4007 TR          |

\*\*\* 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>

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

| <u>Central Part Number</u> | <u>Replacement</u> |
|----------------------------|--------------------|
|----------------------------|--------------------|

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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