

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

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Manufacturers of World Class Discrete Semiconductors

## 1N4001GPP SERIES

GLASS PASSIVATED JUNCTION  
SILICON RECTIFIER  
1.0 AMP, 50 THRU 1000 VOLTS

JEDEC DO-41 CASE

### DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N4001GPP Series types are 1.0 Amp Glass Passivated Junction Silicon Rectifiers which are high quality, well constructed, highly reliable components designed for use in all types of military, commercial, industrial, entertainment, computer, and automotive applications. **THIS DEVICE IS MANUFACTURED WITH A GLASS PASSIVATED CHIP FOR OPTIMUM RELIABILITY.**

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

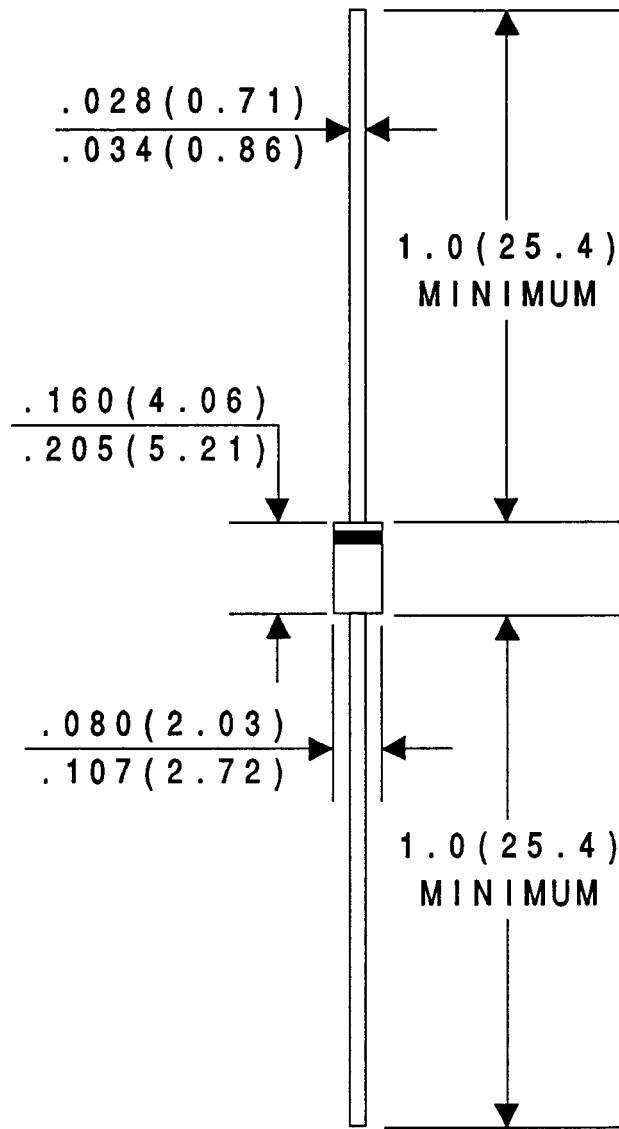
SYMBOL	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
	GPP	GPP	GPP	GPP	GPP	GPP	GPP	
Peak Repetitive Reverse Voltage $V_{RRM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage $V_R$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage $V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Forward Current @ $T_A = 75^\circ\text{C}$	$I_O$			1.0				A
Peak Forward Surge Current $I_{FSM}$				30				A
Operating and Storage Junction Temperature $T_J, T_{stg}$				-65 to +175				$^\circ\text{C}$
Thermal Resistance $\theta_{JA}$				45				$^\circ\text{C/W}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
$V_F$	$I_F = 1.0\text{A}$			1.1	V
$I_R$	$V_R = \text{Rated } V_{RRM}$			5.0	$\mu\text{A}$
$I_R$	$V_R = \text{Rated } V_{RRM}, T_A = 125^\circ\text{C}$			50	$\mu\text{A}$
$t_{rr}$	$I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$			2.0	$\mu\text{s}$
$C_J$	$V_R = 4.0\text{V}, f = 1.0\text{MHz}$		8.0		pF

(SEE REVERSE FOR MECHANICAL OUTLINE)

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  
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[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

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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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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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