

1N5550 1N5553  
1N5551 1N5554  
1N5552

**GLASS PASSIVATED  
SILICON RECTIFIERS  
3.0 AMP, 200 THRU 1000 VOLT**



**GPR-4AM CASE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 1N5550 series types are silicon rectifiers mounted in a hermetically sealed, glass passivated package designed for general purpose applications where high reliability is required.

**MARKING: FULL PART NUMBER**

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

|  | SYMBOL         | 1N5550 | 1N5551 | 1N5552      | 1N5553 | 1N5554 | UNITS              |
|--|----------------|--------|--------|-------------|--------|--------|--------------------|
| Peak Repetitive Reverse Voltage                    | $V_{RRM}$      | 200    | 400    | 600         | 800    | 1000   | V                  |
| DC Blocking Voltage                                | $V_R$          | 200    | 400    | 600         | 800    | 1000   | V                  |
| RMS Reverse Voltage                                | $V_{R(RMS)}$   | 140    | 280    | 420         | 560    | 700    | V                  |
| Average Forward Current ( $T_A=55^\circ\text{C}$ ) | $I_O$          |        |        | 3.0         |        |        | A                  |
| Peak Forward Surge Current, $t_p=8.3\text{ms}$     | $I_{FSM}$      |        |        | 100         |        |        | A                  |
| Operating and Storage Junction Temperature         | $T_J, T_{stg}$ |        |        | -65 to +200 |        |        | $^\circ\text{C}$   |
| Thermal Resistance (Note 1)                        | $\Theta_{JL}$  |        |        | 30          |        |        | $^\circ\text{C/W}$ |

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

| SYMBOL   | TEST CONDITIONS   | MIN  | MAX | UNITS         |
|----------|---|------|-----|---------------|
| $I_R$    | $V_R=\text{Rated } V_{RRM}$   |      | 1.0 | $\mu\text{A}$ |
| $I_R$    | $V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$                        |      | 75  | $\mu\text{A}$ |
| $V_F$    | $I_F=3.0\text{A}$ (200V thru 600V)  |      | 1.0 | V             |
| $V_F$    | $I_F=3.0\text{A}$ (800V thru 1000V)                                       |      | 1.1 | V             |
| $BV_R$   | $I_R=50\mu\text{A}$ (1N5550)  | 240  |     | V             |
| $BV_R$   | $I_R=50\mu\text{A}$ (1N5551)  | 460  |     | V             |
| $BV_R$   | $I_R=50\mu\text{A}$ (1N5552)  | 660  |     | V             |
| $BV_R$   | $I_R=50\mu\text{A}$ (1N5553)  | 880  |     | V             |
| $BV_R$   | $I_R=50\mu\text{A}$ (1N5554)  | 1100 |     | V             |
| $t_{rr}$ | $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (200V thru 600V)  |      | 2.0 | $\mu\text{s}$ |
| $t_{rr}$ | $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (800V thru 1000V) |      | 4.0 | $\mu\text{s}$ |

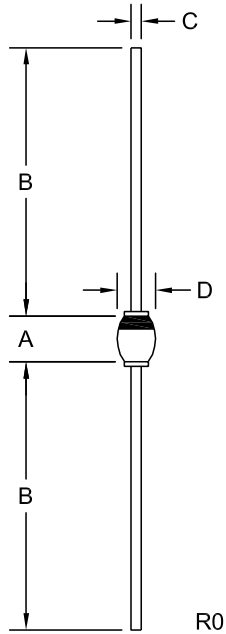
Notes: (1) At 0.375 inch (9.52mm) lead length from body.

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GPR-4AM CASE - MECHANICAL OUTLINE



| SYMBOL | INCHES |       | MILLIMETERS |      |
|--------|--------|-------|-------------|------|
|        | MIN    | MAX   | MIN         | MAX  |
| A      | 0.165  | 0.189 | 4.20        | 4.80 |
| B      | 1.024  | --    | 26.00       | --   |
| C      | 0.037  | 0.042 | 0.95        | 1.06 |
| D      | 0.130  | 0.175 | 3.30        | 4.45 |

GPR-4AM (REV: R0)

R2 (27-February 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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