

1N5059 1N5061  
1N5060 1N5062

GLASS PASSIVATED  
SILICON RECTIFIERS  
1.0 AMP, 200 THRU 800 VOLT



GPR-1A CASE



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

#### DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N5059 series types are silicon rectifiers manufactured in a hermetically sealed, glass passivated package, designed for general purpose applications where high reliability is desired. Higher voltage devices are available in the CPR1-010 series.

#### MARKING: FULL PART NUMBER

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

|                                                      | SYMBOL         | 1N5059 | 1N5060      | 1N5061 | 1N5062 | UNITS                |
|------------------------------------------------------|----------------|--------|-------------|--------|--------|----------------------|
| Peak Repetitive Reverse Voltage                      | $V_{RRM}$      | 200    | 400         | 600    | 800    | V                    |
| DC Blocking Voltage                                  | $V_R$          | 200    | 400         | 600    | 800    | V                    |
| RMS Reverse Voltage                                  | $V_{R(RMS)}$   | 140    | 280         | 420    | 560    | V                    |
| Average Forward Current ( $T_A=75^{\circ}\text{C}$ ) | $I_O$          |        |             | 1.0    |        | A                    |
| Peak Forward Surge Current, $t_p=8.3\text{ms}$       | $I_{FSM}$      |        |             | 40     |        | A                    |
| Operating and Storage Junction Temperature           | $T_J, T_{stg}$ |        | -65 to +175 |        |        | $^{\circ}\text{C}$   |
| Thermal Resistance                                   | $\Theta_{JA}$  |        | 40          |        |        | $^{\circ}\text{C/W}$ |

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

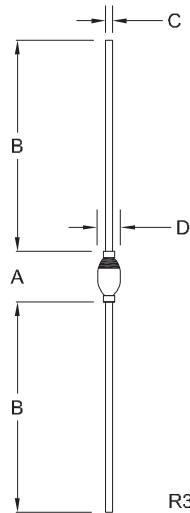
| SYMBOL | TEST CONDITIONS                                                       | MAX | UNITS         |
|--------|-----------------------------------------------------------------------|-----|---------------|
| $I_R$  | $V_R=\text{Rated } V_{RRM}$                                           | 5.0 | $\mu\text{A}$ |
| $I_R$  | $V_R=\text{Rated } V_{RRM}, T_A=175^{\circ}\text{C}$ (1N5059, 1N5060) | 300 | $\mu\text{A}$ |
| $I_R$  | $V_R=\text{Rated } V_{RRM}, T_A=175^{\circ}\text{C}$ (1N5061, 1N5062) | 200 | $\mu\text{A}$ |
| $V_F$  | $I_F=1.0\text{A}$                                                     | 1.2 | V             |
| $C_J$  | $V_R=4.0\text{V}, f=1.0\text{MHz}$                                    | 15  | pF            |

1N5059 1N5061  
1N5060 1N5062

GLASS PASSIVATED  
SILICON RECTIFIERS  
1.0 AMP, 200 THRU 800 VOLT



#### GPR-1A CASE - MECHANICAL OUTLINE



| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | -          | 0.240 | -           | 6.10 |
| B      | 1.000      | -     | 25.40       | -    |
| C      | 0.028      | 0.034 | 0.71        | 0.86 |
| D      | 0.070      | 0.150 | 1.80        | 3.81 |

GPR-1A (REV: R3)

MARKING: FULL PART NUMBER

R5 (28-February 2013)