

1N5615 1N5621  
1N5617 1N5623  
1N5619

**FAST RECOVERY  
GLASS PASSIVATED  
SILICON RECTIFIERS  
1.0 AMP, 200 THRU 1000 VOLT**



**GPR-1A CASE**



[www.centra-semi.com](http://www.centra-semi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 1N5615 series types are silicon rectifiers mounted in a hermetically sealed, glass passivated package, designed for general purpose applications where fast reverse recovery times and high reliability is desired.

**MARKING: FULL PART NUMBER**

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

	SYMBOL	1N5615	1N5617	1N5619	1N5621	1N5623	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 ( $T_A=55^\circ\text{C}$ )	$I_O$			1.0			A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$			50			A
Operating and Storage Junction Temperature	$T_J, T_{stg}$			-65 to +200			$^\circ\text{C}$

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

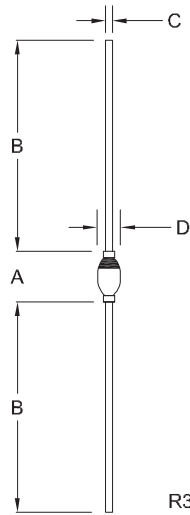
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=\text{Rated } V_{RRM}$		0.5	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$		25	$\mu\text{A}$
$BV_R$	$I_R=50\mu\text{A}$ (1N5615)	220		V
$BV_R$	$I_R=50\mu\text{A}$ (1N5617)	440		V
$BV_R$	$I_R=50\mu\text{A}$ (1N5619)	660		V
$BV_R$	$I_R=50\mu\text{A}$ (1N5621)	880		V
$BV_R$	$I_R=50\mu\text{A}$ (1N5623)	1100		V
$V_F$	$I_F=1.0\text{A}$		1.2	V
$C_J$	$V_R=12\text{V}, f=130\text{kHz}$		35	pF
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (1N5615, 1N5617)		150	ns
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (1N5619)		250	ns
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (1N5621)		300	ns
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (1N5623)		500	ns

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#### 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

R1 (28-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

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