

1N5416 THRU 1N5420

**FAST RECOVERY GLASS
PASSIVATED SILICON RECTIFIERS
3.0 AMP, 100 THRU 600 VOLT**

**GPR-4AM CASE**www.centralemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 1N5416 series devices are silicon rectifiers mounted in a hermetically sealed, glass passivated package, designed for general purpose applications where fast reverse recovery times and high reliability are required.

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

	SYMBOL	<u>1N5416</u>	<u>1N5417</u>	<u>1N5418</u>	<u>1N5419</u>	<u>1N5420</u>	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	500	600	V
DC Blocking Voltage	V_R	100	200	400	500	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	140	280	350	420	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}			80			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)

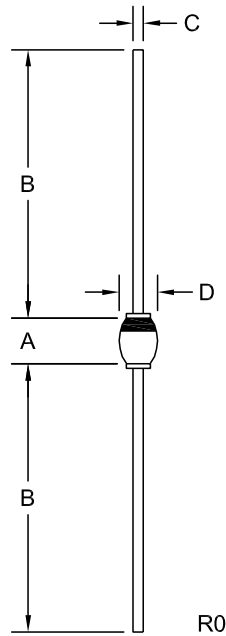
SYMBOL	TEST CONDITIONS	<u>1N5416</u>		<u>1N5417</u>		<u>1N5418</u>		<u>1N5419</u>		<u>1N5420</u>		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I_R	$V_R=\text{Rated } V_{RRM}$	-	1.0	-	1.0	-	1.0	-	1.0	-	1.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$	-	20	-	20	-	20	-	20	-	20	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=175^\circ\text{C}$	-	2.0	-	2.0	-	2.0	-	2.0	-	2.0	mA
BV_R	$I_R=50\mu\text{A}$	110	-	220	-	440	-	550	-	660	-	V
V_F	$I_F=3.0\text{A}$	-	1.1	-	1.1	-	1.1	-	1.1	-	1.1	V
V_F	$I_F=9.0\text{A}$	-	1.5	-	1.5	-	1.5	-	1.5	-	1.5	V
C_J	$V_R=12\text{V}, f=1.0\text{MHz}$	-	175	-	150	-	120	-	110	-	100	pF
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	-	150	-	150	-	150	-	250	-	400	ns

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GPR-4AM CASE - MECHANICAL OUTLINE



DIMENSIONS				
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)

R3 (19-June 2019)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd 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

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).

CONTACT US

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