

CPR5U-020
CPR5U-040
CPR5U-060

**GLASS PASSIVATED
ULTRA FAST RECOVERY RECTIFIERS
5.0 AMP, 200 THRU 600 VOLT**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CPR5U-020, CPR5U-040, and CPR5U-060 are silicon rectifiers mounted in a hermetically sealed, glass passivated package, designed for commercial, industrial, entertainment, and automotive applications where ultra fast switching speeds are required.

MARKING: FULL PART NUMBER

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

	SYMBOL	<u>-020</u>	<u>-040</u>	<u>-060</u>	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	200	400	600	V
DC Blocking Voltage	V_R	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	V
Average Forward Current	I_O		5.0		A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}		125		A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +175			$^\circ\text{C}$
Thermal Resistance	θ_{JA}	55			$^\circ\text{C/W}$

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

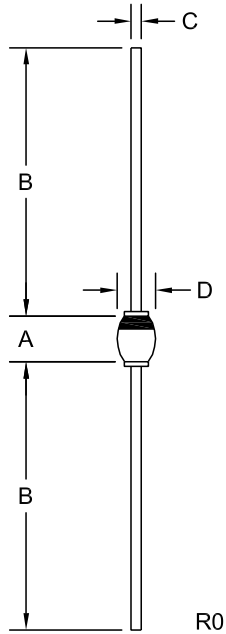
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$	0.5	5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$		50	μA
V_F	$I_F=3.0\text{A}$	1.10	1.25	V
V_F	$I_F=3.0\text{A}, T_A=100^\circ\text{C}$		1.15	V
V_F	$I_F=5.0\text{A}$	1.20	1.40	V
V_F	$I_F=5.0\text{A}, T_A=100^\circ\text{C}$		1.30	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$		100	pF
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	25	50	ns

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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)

R3 (8-May 2013)

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

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
Support Team Fax: (631) 435-3388
www.centalsemi.com

Worldwide Field Representatives:
www.centalsemi.com/wwreps

Worldwide Distributors:
www.centalsemi.com/wwdistributors

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