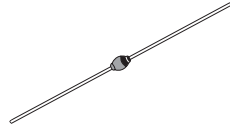


CPR5U-020  
CPR5U-040  
CPR5U-060

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



**GPR-4AM CASE**

# Central<sup>TM</sup> Semiconductor Corp.

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR CPR5U Series are silicon rectifiers manufactured in a hermetically sealed, glass passivated package designed for use in all types of 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)

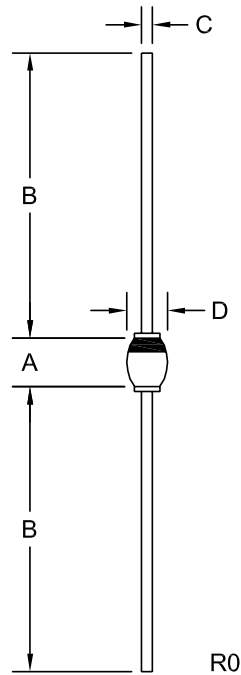
		<b>CPR5U</b>			
	<b>SYMBOL</b>	<b>-020</b>	<b>-040</b>	<b>-060</b>	<b>UNITS</b>
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	V
DC Blocking Voltage	$V_R$	200	400	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	V
Average Forward Current	$I_O$		5.0		A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$		125		A
Operating and Storage Junction Temperature	$T_J, T_{stg}$		-65 to +175		$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$		55		$^\circ\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>TYP</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_R=\text{Rated } V_{RRM}$		0.5	5.0	$\mu\text{A}$
$I_R$	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$			50	$\mu\text{A}$
$V_F$	$I_F=3.0\text{A}$		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

**GLASS PASSIVATED ULTRA FAST  
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**GPR-4AM - 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)

**MARKING CODE: FULL PART NUMBER**

R2 (6-May 2008)