

1N5188
1N5189
1N5190

**FAST RECOVERY, GLASS
PASSIVATED SILICON RECTIFIER
3 AMP, 400 THRU 600 VOLTS**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N5188 Series are silicon rectifiers mounted in a hermetically sealed, glass passivated package, designed for general purpose applications where fast reverse recovery times are required.

MARKING: FULL PART NUMBER

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

	SYMBOL	1N5188	1N5189	1N5190	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	400	500	600	V
DC Blocking Voltage	V_R	400	500	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	280	350	420	V
Average Forward Current	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)

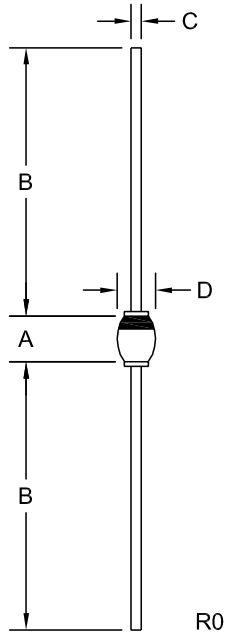
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$		2.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=100^\circ\text{C}$		100	μA
V_F	$I_F=9.0\text{A}, t_p=380\mu\text{s}$	0.9	1.5	V
BV_R	$I_R=100\mu\text{A}$ (1N5188)	480		V
BV_R	$I_R=100\mu\text{A}$ (1N5189)	550		V
BV_R	$I_R=100\mu\text{A}$ (1N5190)	660		V
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (1N5188)		250	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (1N5189)		300	ns
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ (1N5190)		400	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)

R0 (5-March 2012)