

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

1N5415
1N5416
1N5417
1N5418
1N5419
1N5420

FAST RECOVERY
GLASS PASSIVATED RECTIFIER
3.0 AMPS, 50 THRU 600 VOLTS
GPR-3A CASE*

DESCRIPTION

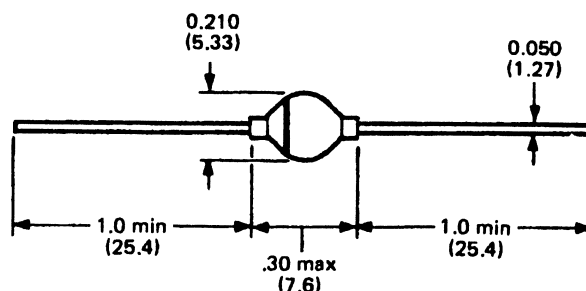
The CENTRAL SEMICONDUCTOR 1N5415 series types are silicon rectifiers mounted in a hermetically sealed, glass passivated package designed for general purpose applications where fast reverse recovery times and high reliability are required.

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

	SYMBOL	1N5415	1N5416	1N5417	1N5418	1N5419	1N5420	UNI
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	500	600	V
DC Blocking Voltage	V_R	50	100	200	400	500	600	V
RMS Reverse Voltage	$V_R(\text{RMS})$	35	70	140	280	350	420	V
Average Forward Current ($T_A=55^\circ\text{C}$)	I_O			3.0				A
Peak Forward Surge Current	I_{FSM}			80				A
Operating and Storage Junction Temperature	T_J, T_{STG}			-65 TO +200				$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

SYMBOL	TEST CONDITIONS	1N5415	1N5416	1N5417	1N5418	1N5419	1N5420	UNI
I_R	$V_R=\text{Rated } V_{RRM}$	1.0	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	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	2.0	mA
V_F	$I_F=3.0\text{A}$	1.1	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	1.5	V
BV_R	$I_R=50\mu\text{A}$	55	110	220	440	550	660	V
C	$V_R=12\text{V}, f=1.0\text{MHz}$	200	175	150	120	110	100	pF
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A},$ Recov. to 0.25A	150	150	150	150	250	400	ns



DIMENSIONS IN INCHES (MILLIMETERS)