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

RG1 SERIES

MINIATURE GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER

VOLTAGE RANGE
50 to 1000 Volts

CURRENT
1.0 Ampere

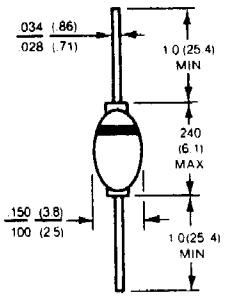
FEATURES

- High temperature metallurgically bonded — no compression contacts as found in diode-constructed rectifiers
- Glass passivated junction in a DO-204AP package
- 1 ampere operation at T_A = 55°C with no thermal runaway
- Typical I_R less than 1 μA
- Fast switching for high efficiency.
- Exceeds environmental standards of MIL-STD-19500
- High temperature soldering guaranteed 350°C/10 seconds/.375" (9.5mm) lead length/5 lbs., (2.3) tension

MECHANICAL DATA

Case: One piece glass, hermetically sealed
Terminals: Axial leads, solderable per MIL-STD-202, Method 208
Polarity: Color band denotes cathode
Mounting Position: Any
Weight: .02 ounce, .56 gram

DO-204AP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

	RG1A	RG1B	RG1D	RG1G	RG1J	RG1K	RG1M	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	70	200	400	600	800	1000	V
Maximum Average Forward Rectified Current, .375" (9.5mm) Lead Length at T_A = 55°C	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.3							V
Maximum Full Load Reverse Current, Full Cycle Average, .375", (9.5mm) Lead Length at T_A = 25°C / T_A = 100°C	1.0 / 100							μA / μA
Maximum DC Reverse Current, at Rated DC Blocking Voltage	2.0							μA
Maximum Reverse Recovery Time (Note 1)	150	150	150	150	200	250	500	ns
Typical Junction Capacitance (Note 2)	10							pF
Operating and Storage Temperature Range, T_J, T_{STG}	-65 to +175							°C

NOTES:
1. Measured with IF = .5A, IR = 1A, Irr = .25A.
2. Measured at 1.0MHz and applied reverse voltage of 4.0VDC.