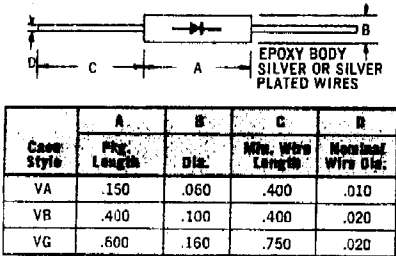
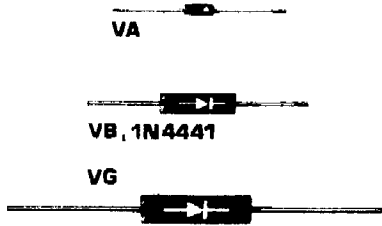


# New Jersey Semi-Conductor Products, Inc.

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SPRINGFIELD, NEW JERSEY 07081  
U.S.A.

## VA10 - VA30X VB10 - VB50X VG1 - VG20 VG1X - VG20X

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These rectifiers offer high voltage ranges in minimum-sized, epoxy-encapsulated packages with low leakage current. All ratings are obtained without the use of special heat sinks or mounting techniques (except VC Series).

They are designed to withstand 500 G's shock and vibration of 100 Hz with a peak acceleration of 10 G's.

Applications: television receivers, electrostatic power supplies, electrostatic copiers, electrostatic air filters and precipitators, cathode ray tube power supplies, transmitters, and microwave ovens.

Electrical Characteristics (@ T <sub>a</sub> = 25°C unless Otherwise Specified)	Series VA & VB and IN4441*	Series VP	Series VG	Series VC & VCX*
Max. DC Reverse Current @ PIV and 25°C, I <sub>RM</sub>	.05μA 03μA*	1μA	1μA	1μA 2μA*
Max. DC Reverse Current @ PIV and 100°C/85°C*, I <sub>RM</sub>	5.0μA 60μA*	40μA 60μA*	40μA 60μA*	10μA 20μA*
Max. Reverse Recovery Time, t <sub>rr</sub> , Recovery to 1.0 mA	250 nanosec* (I <sub>F</sub> = 2 mA & I <sub>R</sub> = 4 mA)	250 nanosec* (I <sub>F</sub> = 2 mA & I <sub>R</sub> = 4 mA)	250 nanosec* (I <sub>F</sub> = 2 mA & I <sub>R</sub> = 4 mA)	300 nanosec* (I <sub>F</sub> = 1 A & I <sub>R</sub> = 2 A)
Ambient Operating Temperature Range, T <sub>a</sub>	+150°C +85°C*	-55°C to +150°C +85°C*	-55°C to +150°C +85°C*	-50°C to +125°C
Max. One-Half Cycle Surge Current, I <sub>SM</sub> @ 60 Hz	3 Amps	3 Amps	3 Amps	50 Amps 35 Amps*

\*Fast Recovery Series.

### SERIES VA • VB • IN4441

Part No.	Peak Rev. Reverse Voltage (V <sub>RRM</sub> ) (Volts)	Avg. Forw. Current I <sub>F</sub> @ 40°C (mA)	Max. Forw. Voltage Drop @ 25°C & I <sub>F</sub> (Volts)	PRICING	
				1-99	100-999
VA10	1,000	50	4	\$1.36	\$1.02
VA15	1,500	50	4	1.44	1.08
VA20	2,000	50	4	1.55	1.16
VA25	2,500	50	4	1.66	1.25
VA30	3,000	25	6	1.93	1.45
VA35	3,500	25	6	2.70	2.02
VA10X	1,000	40	6	1.80	1.35
VA15X	1,500	40	6	1.93	1.45
VA20X	2,000	40	6	2.07	1.55
VA25X	2,500	20	8	2.20	1.65
VA30X	3,000	20	8	2.85	2.13
VB10	1,000	100	5	1.41	1.07
VB15	1,500	100	5	1.51	1.15
VB20	2,000	100	5	1.59	1.20
VB25	2,500	100	5	1.72	1.30
VB30	3,000	50	10	1.88	1.42
VB40	4,000	50	10	2.05	1.56
VB50	5,000	50	10	2.40	1.82
VB60	6,000	50	10	2.62	1.99
VB10X	1,000	50	6	1.88	1.43
VB15X	1,500	50	6	2.01	1.53
VB20X	2,000	50	6	2.12	1.60
VB25X	2,500	25	12	2.30	1.73
VB30X	3,000	25	12	2.50	1.90
VB40X	4,000	25	12	2.74	2.08
VB50X	5,000	25	12	3.20	2.42
IN4441	1,500	25	4	2.01	1.53

### SERIES VG

Part No.	Peak Rev. Reverse Voltage (V <sub>RRM</sub> ) (Volts)	Avg. Forw. Current I <sub>F</sub> @ 80°C (mA)	Max. Forw. Voltage Drop @ 25°C & I <sub>F</sub> (Volts)	PRICING	
				1-99	100-999
VG1	1,000	100	5	\$ .80	\$ .65
VG2	2,000	100	5	.85	.68
VG3	3,000	50	10	.87	.77
VG4	4,000	50	10	1.04	.83
VG5	5,000	50	12	1.22	.97
VG7	7,000	25	14	1.30	1.03
VG10	10,000	25	20	1.49	1.18
VG12	12,000	10	24	1.56	1.25
VG15	15,000	10	30	1.76	1.40
VG20	20,000	10	40	2.08	1.65
VG1X	1,000	50	6	.85	.68
VG2X	2,000	50	6	.89	.71
VG3X	3,000	25	12	.99	.78
VG4X	4,000	25	12	1.14	.91
VG5X	5,000	25	14	1.35	1.07
VG7X	7,000	10	16	1.42	1.13
VG10X	10,000	10	24	1.64	1.30
VG12X	12,000	5	30	1.74	1.38
VG15X	15,000	5	36	1.94	1.54
V320X	20,000	5	50	2.29	1.82

#### NOTES:

- Suffix (X) denotes Fast Recovery Series.
- Maximum lead and terminal temperature for soldering, 3/8 inch from case, 5 seconds at 250°C.
- If operated over 10,000 V./inch in length, devices should be immersed in oil or re-encapsulated.

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

