

**High Performance RFI Filters for Switching Power Supplies**

# N Series



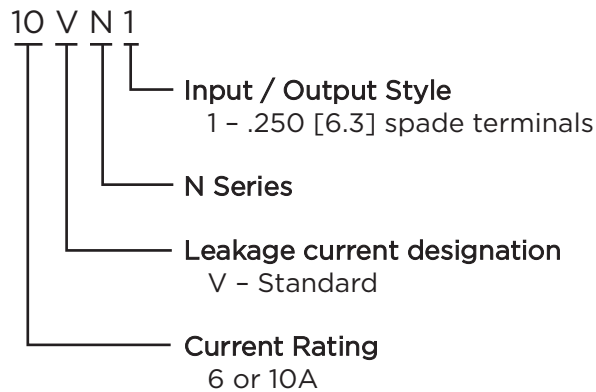
UL Recognized  
CSA Certified  
VDE Approved



## N Series

- Superior attenuation for most digital electronic equipment over the frequency range of 10kHz to 30MHz
- Provides excellent common mode and differential mode performance
- Cost-effective solution to very noisy equipment that must meet conducted emission limits

## Ordering Information



## Available Part Numbers

6VN1	10VN1
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## Specifications

**Maximum leakage current each Line to Ground:**

@ 120 VAC 60 Hz:	1.2 mA
@ 250 VAC 50 Hz:	2.0 mA

**Hipot rating (one minute):**

Line to Ground:	2250 VDC
Line to Line:	1450 VDC

**Rated Voltage (max):** 250 VAC

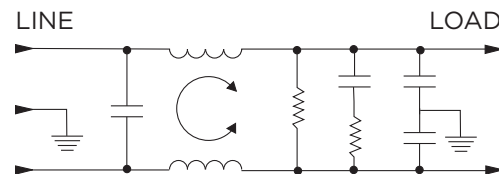
**Operating Frequency:** 50/60 Hz

**Rated Current:** 6 to 10A

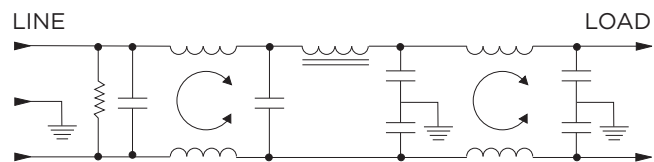
**Operating Ambient Temperature Range (at rated current  $I_r$ ):** -10°C to +40°C  
In an ambient temperature ( $T_a$ ) higher than +40°C the maximum operating current ( $I_o$ ) is calculated as follows:  $I_o = I_r \sqrt{(85-T_a)/45}$

## Electrical Schematics

### 3VN



### 10VN



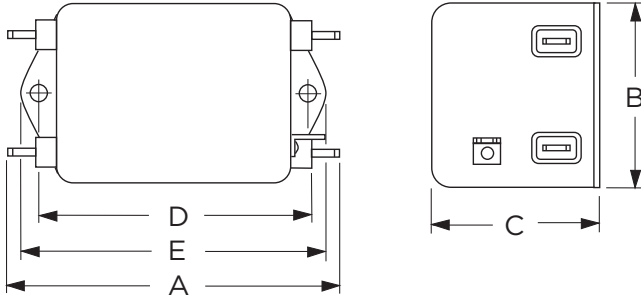
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RFI Power Line Filters

**High Performance RFI Filters for Switching Power Supplies** *(continued)*

# N Series

## Case Styles



Typical Dimensions:

Line/Load Terminals (4): 250 [6.3] with .07 [1.8] Dia. hole  
Ground Terminal (1): 250 [6.3] with .07 x .16 [1.8 x 3.8] slot  
Mounting Holes (2): .188 [4.78] Dia.

## Case Dimensions

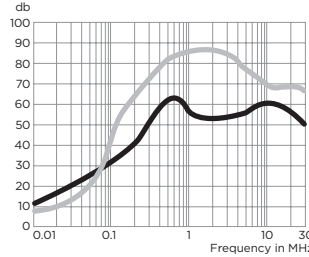
Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
6VN1	<b>3.56</b> <i>90.4</i>	<b>2.15</b> <i>54.6</i>	<b>1.81</b> <i>45.9</i>	<b>2.938</b> <i>74.63</i>	<b>3.38</b> <i>85.8</i>
10VN1	<b>4.69</b> <i>119.1</i>	<b>2.27</b> <i>57.7</i>	<b>1.8</b> <i>45.7</i>	<b>4.063</b> <i>103.2</i>	<b>4.47</b> <i>113.5</i>

## Performance Data

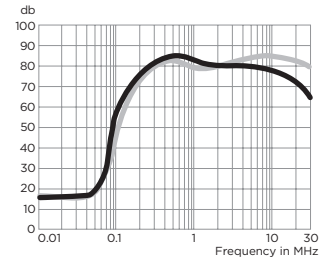
### Typical Insertion Loss

Measured in closed 50 Ohm system

#### 6VN



#### 10VN



— Common Mode / Asymmetrical (L-G)  
- - - Differential Mode / Symmetrical (L-L)

## Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency – MHz								
	.01	.05	.1	.15	.5	1	5	10	30
6A	6	20	28	34	58	54	53	53	43
10A	8	8	44	55	75	70	70	70	55

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz								
	.01	.05	.1	.15	.5	1	5	10	30
6A	6	14	41	52	66	77	72	60	60
10A	6	6	35	45	72	70	72	75	70