

## **Electronics**

#### High Performance RFI Filters for Switching Power Supply

# **N** Series



UL Recognized CSA Certified VDE Approved



#### **N** Series

The N series RFI filters are designed to provide superior common-mode and differential-mode attenuation for most digital electronic equipment (particularly switching power supplies) over the frequency range of 10kHz to 30MHz.

These filters are a cost-effective solution for very noisy equipment that must meet the conducted emission limits of the very stringent EN55022 Level B requirements, as well as FCC Part 15J, Class B.

# **Specifications**

Maximum leakage current, each line-to-ground

@ 120 VAC 60 Hz:@ 250 VAC 50 Hz:1.2mA2.0mA

Hipot rating (one minute):

line-to-ground 2250 VDC line-to-line 1450 VDC Operating frequency: 50/60 Hz Rated voltage (max.): 250 VAC

Rated current:

6VN1 6A 10VN1 10A

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

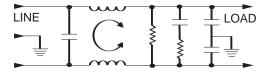
| Current | Frequency-MHz |     |    |     |    |    |    |    |    |
|---------|---------------|-----|----|-----|----|----|----|----|----|
| Rating  | .01           | .05 | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 6VN1    | 6             | 20  | 28 | 34  | 58 | 54 | 53 | 53 | 43 |
| 10VN1   | 8             | 8   | 44 | 55  | 75 | 70 | 70 | 70 | 55 |

Line-to-line in 50 ohm circuit

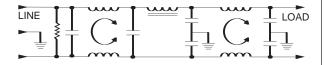
| Current | Frequency-MHz |     |    |     |    |    |    |    |    |
|---------|---------------|-----|----|-----|----|----|----|----|----|
| Rating  | .01           | .05 | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 6VN1    | 6             | 14  | 41 | 52  | 66 | 77 | 72 | 60 | 60 |
| 10VN1   | 6             | 6   | 35 | 45  | 72 | 70 | 72 | 75 | 70 |

## **Electrical Schematics**

#### **6VN1 Model**



#### 10VN1 Model



Resistor location for reference only.

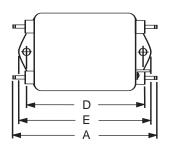


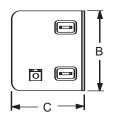


# High Performance RFI Filters for Switching Power Supply (Continued)

# **N** Series

# Case Style 6VN1 & 10VN1





Typical dimensions:

Terminals: .250 [*6.35*] (5) Holes: .07 [*1.8*] Dia.(4) Mounting Holes: .188 [*4.78*] Dia. (2) Slot: .07 x .16 [*1.8* x *4.1*]

## **Case Dimensions**

|            | Α     | В     | С     | D               | Е     |
|------------|-------|-------|-------|-----------------|-------|
| Part No.   | (max) | (max) | (max) | ± .015<br>± .38 | (max) |
| 6VN1       | 3.56  | 2.15  | 1.81  | 2.938           | 3.38  |
|            | 90.4  | 54.6  | 45.9  | 74.63           | 85.8  |
| 10VN1      | 4.69  | 2.27  | 1.8   | 4.063           | 4.47  |
| 10 0 1 1 1 | 119.1 | 57.7  | 45.7  | 103.2           | 113.5 |

## **Part Numbers**

| 6VN1 | 10VN1 |
|------|-------|
|------|-------|