

High Performance RFI Filters for Switching Power Supply

N Series



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

Maximum leakage current, each line-to-ground

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

Line-to-ground in 50 ohm circuit

Minimum insertion loss in dB:

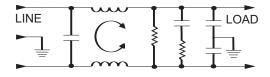
| Current | Frequency-MHz | | | | | | | | |
|---------|---------------|-----|----|-----|----|----|----|----|----|
| Rating | .01 | .05 | .1 | .15 | .5 | 1 | 5 | 10 | 30 |
| 6VN1 | 6 | 20 | 28 | 34 | 58 | 54 | 53 | 53 | 43 |
| 10VN1 | 8 | 8 | 44 | 55 | 75 | 70 | 70 | 70 | 55 |

Line-to-line in 50 ohm circuit

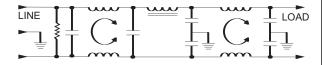
| Current | Frequency-MHz | | | | | | | | |
|---------|---------------|-----|----|-----|----|----|----|----|----|
| Rating | .01 | .05 | .1 | .15 | .5 | 1 | 5 | 10 | 30 |
| 6VN1 | 6 | 14 | 41 | 52 | 66 | 77 | 72 | 60 | 60 |
| 10VN1 | 6 | 6 | 35 | 45 | 72 | 70 | 72 | 75 | 70 |

Electrical Schematics

6VN1 Model



10VN1 Model



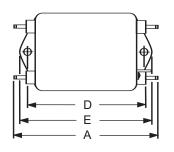
Resistor location for reference only.

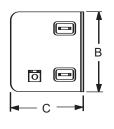


High Performance RFI Filters for Switching Power Supply (Continued)

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 ± .38 | (max) |
| 6VN1 | 3.56 | 2.15 | 1.81 | 2.938 | 3.38 |
| 01111 | 90.4 | 54.6 | 45.9 | 74.63 | 85.8 |
| 10VN1 | 4.69 | 2.27 | 1.8 | 4.063 | 4.47 |
| 100101 | 119.1 | <i>57.7</i> | 45.7 | 103.2 | 113.5 |

Part Numbers

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