

High Performance RFI Filters for Switching Power Supplies

G Series



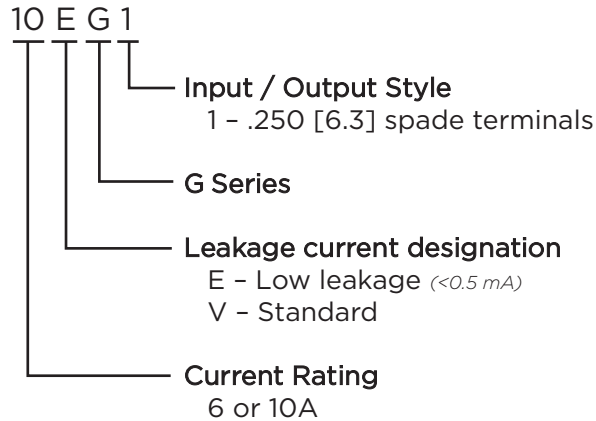
UL Recognized
CSA Certified
VDE Approved



G Series

- Designed to provide excellent attenuation for most digital electronics equipment
- Broad frequency range of performance from 20kHz to 30MHz
- Size and cost-effective solution
- Designed to help comply with EN55022 Level A and FCC Part 15J Class B

Ordering Information



Available Part Numbers

| | |
|-------|-------|
| 6EG1 | 6VG1 |
| 10EG1 | 10VG1 |

Specifications

Maximum leakage current each Line to Ground:

| | EG Models | VG Models |
|------------------|-----------|-----------|
| @ 120 VAC 60 Hz: | .30 mA | 1.2 mA |
| @ 250 VAC 50 Hz: | .50 mA | 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:

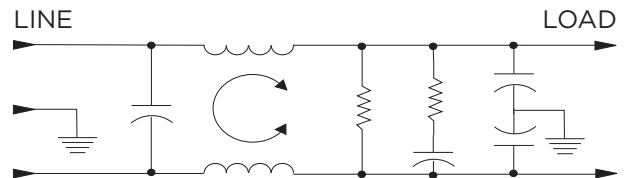
6 & 10A

Operating Ambient Temperature Range

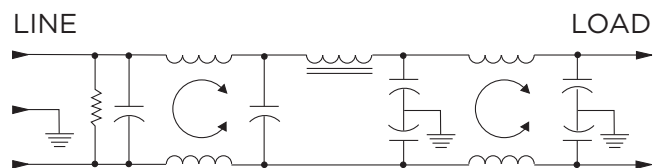
(at rated current I_r): -10°C to +40°C
In an ambient temperature (T_a) higher than +40°C the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85-T_a)/45}$

Electrical Schematics

6EG1 & 6VG1



10EG1 & 10VG1

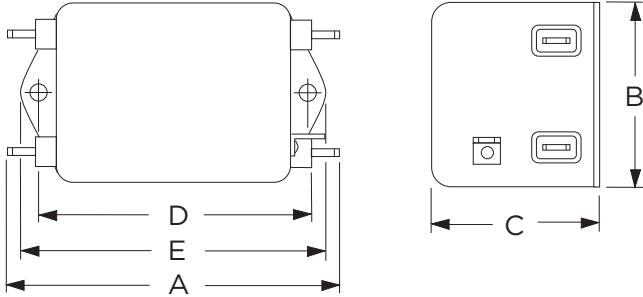


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RFI Power Line Filters

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

G 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) |
|-----------|-----------------------------|----------------------------|----------------------------|------------------------------|-----------------------------|
| 6EG1/VG1 | 3.56 <i>90.4</i> | 2.15 <i>54.6</i> | 1.56 <i>39.6</i> | 2.938 <i>74.63</i> | 3.38 <i>85.8</i> |
| 10EG1/VG1 | 4.69 <i>119.1</i> | 2.27 <i>57.7</i> | 1.8 <i>45.7</i> | 4.063 <i>103.2</i> | 4.47 <i>113.5</i> |

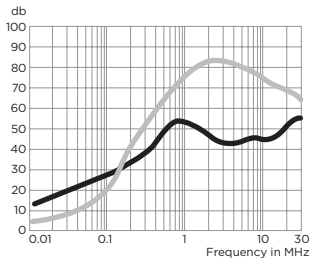
Performance Data

Typical Insertion Loss

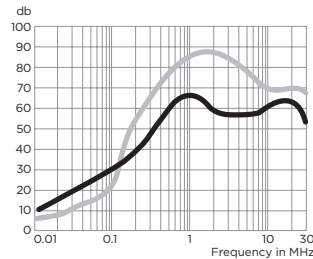
Measured in closed 50 Ohm system

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

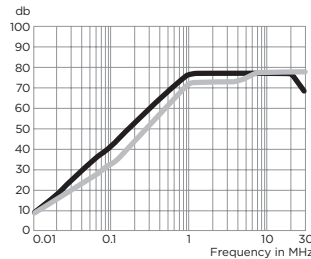
6EG1



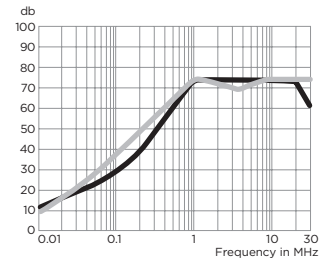
6VG1



10EG1



10VG1



Minimum Insertion Loss

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency – MHz | | | | | | | | | |
|------------------|-----------------|-----|-----|----|-----|----|----|----|----|----|
| | .01 | .05 | .07 | .1 | .15 | .5 | 1 | 5 | 10 | 30 |
| EG Models | | | | | | | | | | |
| 6A | 6 | 19 | 23 | 25 | 29 | 48 | 44 | 43 | 40 | 40 |
| 10A | 8 | 10 | 15 | 18 | 42 | 64 | 65 | 65 | 60 | 60 |
| VG Models | | | | | | | | | | |
| 6A | 4 | 18 | 21 | 25 | 30 | 56 | 55 | 53 | 45 | 45 |
| 10A | 5 | 10 | 24 | 37 | 50 | 72 | 70 | 70 | 60 | 60 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency – MHz | | | | | | | | | |
|------------------|-----------------|-----|-----|----|-----|----|----|----|----|----|
| | .01 | .05 | .07 | .1 | .15 | .5 | 1 | 5 | 10 | 30 |
| EG Models | | | | | | | | | | |
| 6A | 4 | 6 | 10 | 24 | 37 | 66 | 75 | 72 | 50 | 50 |
| 10A | 5 | 5 | 5 | 26 | 40 | 65 | 65 | 60 | 70 | 70 |
| VG Models | | | | | | | | | | |
| 6A | 4 | 7 | 7 | 26 | 39 | 67 | 75 | 68 | 55 | 55 |
| 10A | 5 | 5 | 7 | 26 | 39 | 65 | 60 | 60 | 70 | 70 |