

# SPGA Series

Super Performance General Application Line Filter



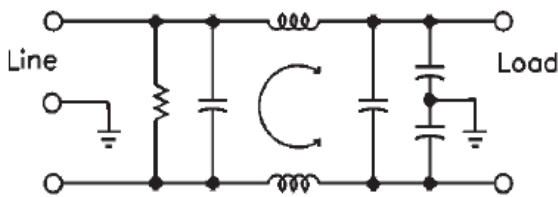
UL File No. E62459  
CSA File No. LR49272



## Applications

The super-performance, general application filters (SPGA series) have significantly higher low frequency performance than the standard GA series. These filters are designed to provide greater reduction of conducted noise below 1MHz.

## Electrical Schematic



## How to define a part number:

**SPGA**

Series

**1**

Case Style

**B**

Schematic

**- 3**

Current Rating

## Specifications

**Voltage rating:** 115/250 VAC

**Line frequency:** 50/60 Hz

**Leakage current:\*** 0.50 mA maximum at 115 V, 60 Hz  
(line-to-ground) 1.00 mA maximum at 250 V, 50 Hz

**Test voltage:** Line to ground, 2250 VDC  
Line to line, 1450 VDC

**Over Load Test:** 6x rated current for 8 secs

**Insulation Res:** 6000megaohms at 100 VDC

\* Low leakage current models (<0.5ma@250VAC / 50Hz) may be ordered by adding the prefix "L", e.g. LSPGA1B-3.

## Common Mode

| Current Rating | Frequency (MHz) |     |     |     |     |    |    |    |    |    |    |
|----------------|-----------------|-----|-----|-----|-----|----|----|----|----|----|----|
|                | .01             | .02 | .05 | .10 | .15 | .5 | 1  | 5  | 10 | 20 | 30 |
| 3 A            | 4               | 8   | 18  | 25  | 29  | 43 | 44 | 42 | 42 | 38 | 30 |
| 6 A            | 4               | 8   | 18  | 25  | 29  | 43 | 44 | 42 | 42 | 38 | 30 |
| 10 A           | 4               | 8   | 18  | 25  | 29  | 43 | 44 | 42 | 42 | 38 | 30 |

## Differential Mode

| Current Rating | Frequency (MHz) |     |     |     |     |    |    |    |    |    |    |
|----------------|-----------------|-----|-----|-----|-----|----|----|----|----|----|----|
|                | .01             | .02 | .05 | .10 | .15 | .5 | 1  | 5  | 10 | 20 | 30 |
| 3 A            | 1               | 1   | 2   | 10  | 25  | 59 | 65 | 62 | 40 | 40 | 40 |
| 6 A            | 1               | 1   | 2   | 10  | 25  | 59 | 65 | 62 | 40 | 40 | 40 |
| 10 A           | 1               | 1   | 2   | 10  | 25  | 59 | 65 | 62 | 40 | 40 | 40 |

Minimum Insertion loss in 50 ohm system per MIL-STD-220A

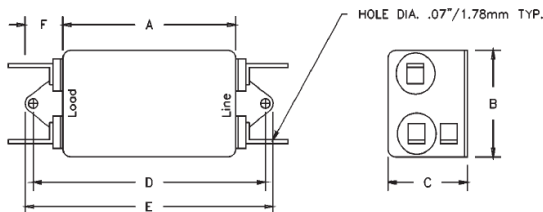
# SPGA Series

## Ordering Information

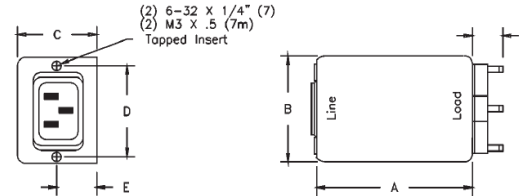
| Current Rating | Part Number | Dimensions (mm) |       |       |        |        |
|----------------|-------------|-----------------|-------|-------|--------|--------|
|                |             | A               | B     | C     | D      | E      |
| 3              | SPGA1B-3    | 63.5            | 50.8  | 28.7  | 74.68  | 84.32  |
|                | SPGA2B-3    | 63.5            | 50.8  | 28.7  | 74.68  | 84.32  |
|                | SPGA3B-3    | 63.5            | 50.8  | 28.7  | 74.68  | 84.32  |
|                | SPGA7B-3*   | 63.5            | 50.8  | 44.45 | 40.0   | 16.0   |
|                | SPGA8B-3*   | 63.5            | 50.8  | 44.45 | 40.0   | 16.0   |
| 6              | SPGA1B-6    | 76.2            | 55.63 | 31.75 | 87.12  | 95.52  |
|                | SPGA2B-6    | 76.2            | 55.63 | 31.75 | 87.12  | 95.52  |
|                | SPGA3B-6    | 76.2            | 55.63 | 31.75 | 87.12  | 95.52  |
|                | SPGA7B-6*   | 76.2            | 55.63 | 31.75 | 40.0   | 16.0   |
|                | SPGA8B-6*   | 76.2            | 55.63 | 31.75 | 40.0   | 16.0   |
| 10             | SPGA1B-10   | 92.2            | 55.63 | 44.45 | 103.12 | 112.78 |
|                | SPGA2B-10   | 92.2            | 55.63 | 44.45 | 103.12 | 112.78 |
|                | SPGA3B-10   | 92.2            | 55.63 | 44.45 | 103.12 | 112.78 |
|                | SPGA7B-10*  | 92.2            | 55.63 | 44.45 | 40.0   | 16.0   |
|                | SPGA8B-10*  | 92.2            | 55.63 | 44.45 | 40.0   | 16.0   |

\* To designate metric versions, add the letter "M" after the letter B, eg: SPGA7BM-6  
 Connections are 0.250 Tab Terminals which extend 14.73mm.  
 18-Gauge wire leads extend 107.95mm  
 Mounting Hole Diameters are 4.78mm

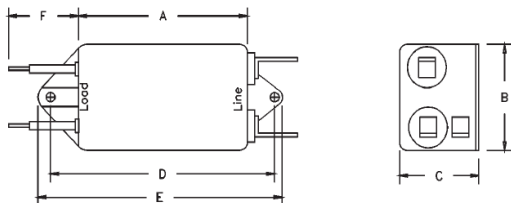
### Style 1:



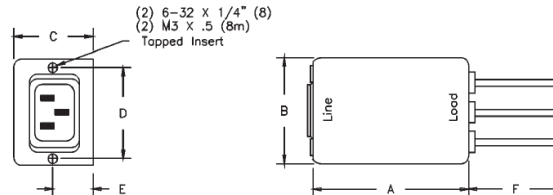
### Style 7 or 7M (metric):



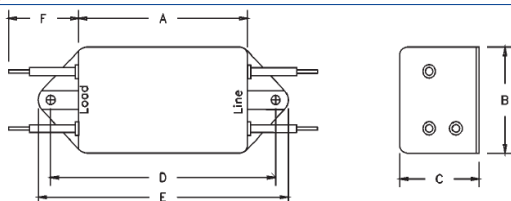
### Style 2:



### Style 8 or 8M (metric):



### Style 3:



### Panel Cutout:

