

# GA Series

Line Filters for General Applications  
1-30 Amp Chassis Mount Package



UL File No. LR56661  
CSA File No. LR49272  
TUV File No. R50154  
VDE File No. 51404

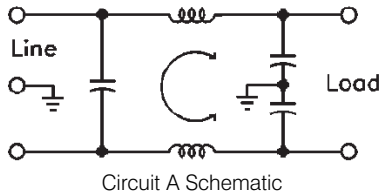


## Applications

SAE Power's general application filters are available in two circuit configurations to provide an economical solution to the majority of interference problems. All units are recognized under UL 1283 and CSA 22.2 No.8-M1986 and are designed to meet the requirements of VDE or DIN specifications.

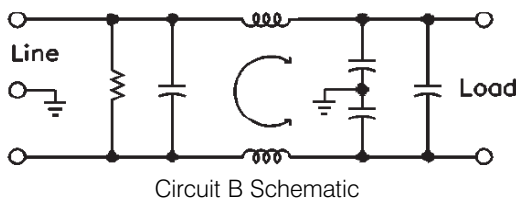
## Circuit A Filters

These filters are designed for a wide variety of filtering applications. They offer the lowest cost and smallest package size for effective control of common mode (line-to-ground) interference. They are available in a wide selection of mechanical configurations and current ratings.

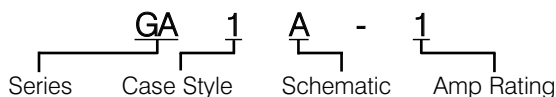


## Circuit B Filters

These filters are used where differential mode (line-to-line) interference reduction is required as well as common mode rejection. They offer the same wide current rating selection and mechanical versatility as Circuit A filters.



## How to define a part number:



## Specifications

<b>Voltage rating:</b>	115/250 VAC
<b>Line frequency:</b>	50/60 Hz
<b>Leakage current:</b> (line-to-ground*)	0.50 mA maximum at 115 V, 60 Hz 1.00 mA maximum at 250 V, 50 Hz
<b>Test voltage:</b>	Line to ground, 2250 VDC Line to line, 1450 VDC
<b>OverCurrent Test:</b>	6X rated for 8 sec.
<b>Insulation:</b>	6000megohms/100VDC Resistance

\*Special low-leakage-current models (less than 0.5 mA at 250 VAC, 50 Hz) may be ordered by using the prefix L on part number, e.g., LGA1A-1.

## Common Mode Performance for both A & B Circuits:

Current Rating	Frequency (MHz)						
	0.15	0.5	1	5	10	20	30
1A	15	30	38	50	50	50	50(dB)
2A	15	30	38	50	50	50	50(dB)
3A	15	30	38	50	50	50	50(dB)
5A	15	30	38	50	50	50	50(dB)
10A	6	20	28	42	45	45	48(dB)
20A	6	20	28	42	45	45	48(dB)
30A	6	20	28	42	45	45	48(dB)

## Differential Mode Performance for A Circuits

Current Rating	Frequency (MHz)						
	0.15	0.5	1	5	10	20	30
1A	0.5	3	6	30	50	40	40(dB)
2A	0.5	3	6	30	50	40	40(dB)
3A	0.5	3	6	30	50	40	40(dB)
5A	0.5	3	6	30	50	40	40(dB)
10A	0.5	3	6	30	50	40	40(dB)
20A	0.5	3	6	30	50	40	40(dB)
30A	0.5	3	6	30	50	40	40(dB)

## Differential Mode Performance for B Circuits

Current Rating	Frequency (MHz)						
	0.15	0.5	1	5	10	20	30
1A	2	5	8	40	60	40	40(dB)
2A	2	5	8	40	60	40	40(dB)
3A	2	5	8	40	60	40	40(dB)
5A	2	5	8	40	60	40	40(dB)
10A	10	13	30	50	50	40	40(dB)
20A	10	13	30	50	50	40	40(dB)
30A	10	13	30	50	50	40	40(dB)

# GA Series

## Circuit A Products

PartNo.	Amps	Dimensions (mm)				
		A	B	C	D	E
GA1A-1	1	44.45	22.35	16	54.1	63.5
GA2A-1	1	44.45	22.35	16	54.1	63.5
GA3A-1	1	44.45	22.35	16	54.1	63.5
GA1A-2	2	44.45	22.35	16	54.1	63.5
GA2A-2	2	44.45	22.35	16	54.1	63.5
GA3A-2	2	44.45	22.35	16	54.1	63.5
GA1A-3	3	44.45	31.75	19.05	54.1	63.5
GA2A-3	3	44.45	31.75	19.05	54.1	63.5
GA3A-3	3	44.45	31.75	19.05	54.1	63.5
GA1A-5	5	44.45	31.75	19.05	54.1	63.5
GA2A-5	5	44.45	31.75	19.05	54.1	63.5
GA3A-5	5	44.45	31.75	19.05	54.1	63.5
GA1A-10	10	44.45	31.75	28.7	54.1	63.5
GA2A-10	10	44.45	31.75	28.7	54.1	63.5
GA3A-10	10	44.45	31.75	28.7	54.1	63.5
GA6A-10	10	44.45	31.75	28.7	54.1	63.5
GA1A-20	20	50.8	50.8	28.7	60.45	70.61
GA6A-20	20	50.8	50.8	28.7	60.45	70.61
GA5A-30	30	98.55	84.07	38.1	95.25	104.9

## Circuit B Products

PartNo.	Amps	Dimensions (mm)				
		A	B	C	D	E
GA1B-1L	1	50.8	44.45	22.35	60.45	70.61
GA2B-1L	1	50.8	44.45	22.35	60.45	70.61
GA3B-1L	1	50.8	44.45	22.35	60.45	70.61
GA1B-2L	2	50.8	44.45	22.35	60.45	70.61
GA2B-2L	2	50.8	44.45	22.35	60.45	70.61
GA3B-2L	2	50.8	44.45	22.35	60.45	70.61
GA1B-3L	3	50.8	44.45	28.7	60.45	70.61
GA2B-3L	3	50.8	44.45	28.7	60.45	70.61
GA3B-3L	3	50.8	44.45	28.7	60.45	70.61
GA1B-5L	5	50.8	44.45	28.7	60.45	70.61
GA2B-5L	5	50.8	44.45	28.7	60.45	70.61
GA3B-5L	5	50.8	44.45	28.7	60.45	70.61
GA1B-10	10	50.8	50.8	28.7	60.45	70.61
GA2B-10	10	50.8	50.8	28.7	60.45	70.61
GA3B-10	10	50.8	50.8	28.7	60.45	70.61
GA6B-10	10	50.8	50.8	28.7	60.45	70.61
GA1B-20	20	63.5	50.8	38.1	74.68	84.33
GA4B-20	20	63.5	50.8	38.1	74.68	84.33
GA5B-30	30	98.55	84.07	38.1	95.25	104.9

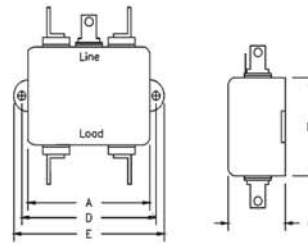
## CASE STYLES:

### GA1 STYLE:

1/4" Tab Terminals extend 14.73mm from chassis

4.75mm Diameter Mounting Holes

\* GA1B-20 Model Requires tri-ear mounting

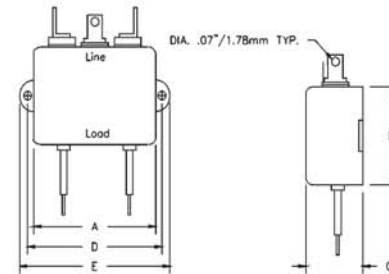


### GA2 STYLE:

1/4" Tab Terminals extend 14.73mm from chassis

18AWG Leads extend 108mm from chassis

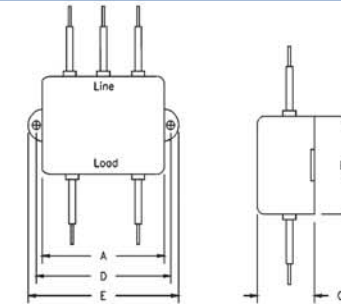
4.75mm Diameter Mounting Holes



### GA3 STYLE:

18AWG Leads extend 108mm from chassis

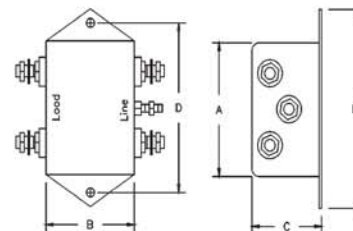
4.75mm Diameter Mounting Holes



### GA4 STYLE:

3/32 x 0.675 Threaded Terminals extend 26.5mm from chassis

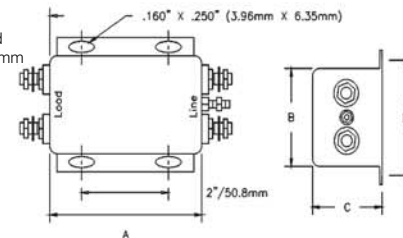
4.75mm Diameter Mounting Holes



### GA5 STYLE:

3/32 x 0.675 Threaded Terminals extend 26.5mm from chassis

3.96 x 6.35mm Dia. Mounting Holes



### GA6 STYLE:

3/32 x 0.675 Threaded Terminals extend 26.5mm from chassis

4.75mm Diameter Mounting Holes

