# DB SERIES GENERAL PURPOSE FILTERS

## INTRODUCTIONS

1. Designed as a general purpose filter providing effective EMI suppression.
2. All part numbers are UL recognized, CSA certified and VDE approved.

## COMPONENTS

| PART NO. | Cx (uF) | L (mH) | Cy (pF) | R (Ω) |
|---|---|---|---|---|
| 02DBAG5 | 0.1 | 1.1 | 3300 | - |
| 02DBAW5 | | | | |
| 03DBAG5 | | 2.8 | | |
| 03DBAW5 | | | | |
| 05DBAG5 | | 2.9 | | |
| 05DBAW5 | | | | |
| • 05DBDG3 | 0.22 | 2.1 | | - |
| • 05DBDW3 | | | | |
| 06DBDW3S | 0.47 | 3.7 | | 330K |
| 10DBAG5 | 0.1 | 1.5 | | - |
| 10DBAW5 | | | | |
| 10DBAS5 | | | | |
| 10DBDW3S | 0.47 | 1.45 | | 330K |
| 10DBDG3S | | | | |
| * 16DBDG3 | 1.0 | 3.6 | 10000 | 200K |
| * 16DBCG5 | 2.2 | | | |
| 20DBAG5 | 0.33 | 0.7 | 3300 | - |
| 20DBAS5 | | | | |
| 12DBBG5B | 0.1 | 0.7 | 4700 | 1.0M |
| 12DBBW5B | | | | |
| 16DBCG5B | | 0.65 | | |
| 16DBCW5B | | | | |
| 20DBCG5B | | 0.60 | | |
| 20DBCS5B | | | | |
| 30DBCS5B | 0.47 | 0.67 | 10000 | |

• UL & CSA approved only.
* No safety approval yet

## MINIMUM INSERTION LOSS IN dB

| COMMON MODE (L-G) IN 50 OHM SYSTEM | | | | | | |
|---|---|---|---|---|---|---|
| CURRENT RATING | FREQUENCY-MHz | | | | | |
| | .15 | .50 | 1.0 | 5.0 | 10 | 30 |
| 2,3,5A | 15 | 30 | 38 | 45 | 45 | 40 |
| 6A | 20 | 25 | 35 | 40 | 45 | 35 |
| 10A | 20 | 30 | 35 | 50 | 50 | 45 |
| * 10A | 15 | 22 | 30 | 40 | 40 | 45 |
| 16A(DG3) | 20 | 30 | 35 | 45 | 50 | 35 |
| * 16A(CG5) | 20 | 30 | 35 | 50 | 50 | 40 |
| 20A | 13 | 20 | 25 | 40 | 45 | 45 |
| 12A (BG5B) (BW5B) | 10 | 20 | 22 | 35 | 40 | 40 |
| 16A (CG5B) (CW5B) | 10 | 18 | 20 | 35 | 50 | 30 |
| 20A (CG5B) (CS5B) | 10 | 20 | 22 | 30 | 35 | 35 |
| 30A (CS5B) | 10 | 28 | 30 | 45 | 50 | 35 |
| DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM | | | | | | |
| 2,3,5A | 6 | 15 | 20 | 40 | 45 | 45 |
| 6A | 10 | 18 | 20 | 30 | 35 | 40 |
| 10A | 6 | 15 | 20 | 44 | 45 | 45 |
| * 10A | 12 | 18 | 20 | 35 | 35 | 40 |
| 16A (DG3) | 10 | 30 | 50 | 50 | 50 | 50 |
| * 16A (CG5) | 20 | 30 | 40 | 45 | 40 | 30 |
| 20A | 15 | 24 | 28 | 45 | 45 | 45 |
| 12A (BG5B) (BW5B) | 5 | 12 | 15 | 35 | 45 | 35 |
| 16A (CG5B) (CW5B) | 5 | 10 | 15 | 45 | 45 | 40 |
| 20A (CG5B) (CS5B) | 4 | 10 | 15 | 45 | 45 | 40 |
| 30A (CS5B) | 12 | 20 | 25 | 45 | 50 | 45 |

* 10DBDG3S, DW3S

## SPECIFICATIONS

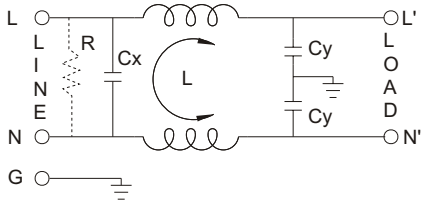
1. Maximum leakage current each
   line-to-ground @ 115VAC 60Hz: 0.25mA
   1.0mA (10000pF)
   @ 250VAC 50Hz: 0.45mA
   2.0mA (10000pF)
2. Hipot rating (one minute)
   line-to-ground: 2250VDC
   line-to-line: 1450VDC
3. Operating frequency: 50/60Hz
4. Rated voltage: 115/250VAC

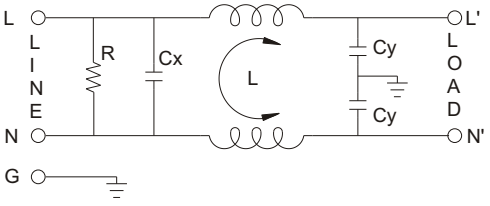
## SERIES DIMENSIONS

| CURRENT RATING | STYLE | DIMENSIONS IN INCHES/mm | | | | |
|---|---|---|---|---|---|---|
| | | A | B | C | D | E |
| 2A | AG5 | 2.15 | 1.77 | 0.65 | 2.13 | 2.54 |
| | | 54.6 | 45.0 | 16.5 | 54.1 | 64.5 |
| | AW5 | 0.96 | | | | |
| | | 24.4 | | | | |
| 3A | AG5 | 2.54 | | 0.77 | | 2.50 |
| | | 64.5 | | 19.5 | | 63.5 |
| | AW5 | 1.33 | | | | |
| | | 33.8 | | | | |
| 5A | AG5 | 2.54 | | | | |
| | | 64.5 | | | | |
| | AW5 | 1.33 | | | | |
| | | 33.8 | | | | |
| 6A | DW3S | 2.55 | 2.08 | 1.29 | 1.575 | 0.61 |
| | | 64.77 | 52.83 | 32.77 | 40.01 | 15.49 |
| 10A | AG5 | 2.54 | 1.77 | 1.18 | 2.13 | 2.50 |
| | | 64.5 | 45.0 | 30.0 | 54.1 | 64.8 |
| | AW5 | 1.33 | | | | |
| | | 33.8 | | | | |
| | AS5 | 3.10 | 2.02 | 1.18 | 2.38 | 2.77 |
| | | 78.7 | 51.3 | 30.0 | 60.5 | 70.3 |
| | DW3S | 2.55 | 2.08 | 1.29 | 1.575 | 0.61 |
| | | 64.80 | 52.80 | 32.80 | 40.00 | 15.50 |
| | DG3S | 3.14 | 2.10 | 1.28 | 1.575 | 0.61 |
| | | 79.80 | 53.30 | 32.50 | 40.00 | 15.50 |
| 16A | DG3 | 4.35 | 1.34 | 1.65 | 2.24 | 0.63 |
| | | 110.50 | 34.0 | 42.0 | 57.0 | 16.0 |
| | CG5 | 3.75 | 2.06 | 1.54 | 2.94 | 3.34 |
| | | 95.25 | 52.30 | 39.10 | 74.70 | 84.80 |
| 20A | AG5 | 3.25 | 2.02 | 1.16 | 2.38 | 2.75 |
| | | 82.5 | 51.3 | 29.5 | 60.5 | 69.9 |
| | AS5 | 3.37 | 2.02 | 1.15 | 2.38 | 2.77 |
| | | | | | | |

| CURRENT RATING | STYLE | DIMENSIONS IN INCHES/mm | | | | | |
|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | F |
| 12A | BG5B | 2.13 | 2.54 | 1.34 | 1.77 | 1.18 | – |
| | | 54.00 | 64.5 | 34.0 | 45.0 | 30.0 | 3.94 |
| | BW5B | | | | | | 100.0 |
| 16A | CG5B | 2.40 | 2.81 | 1.79 | 2.02 | | – |
| | | 61.00 | 71.5 | 45.5 | 51.3 | | 3.94 |
| | CW5B | | | | | | 100.0 |
| 20A | CG5B | 2.95 | 3.34 | 2.04 | 2.52 | | – |
| | | 75.00 | 84.8 | 51.8 | 64.0 | | |
| | CS5B | | | | | | |
| 30A | CS5B | 4.06 | 4.49 | 2.22 | 3.74 | 1.83 | |
| | | 103.0 | 114.0 | 56.5 | 95.0 | 46.4 | |

## ELECTRICAL SCHEMATIC

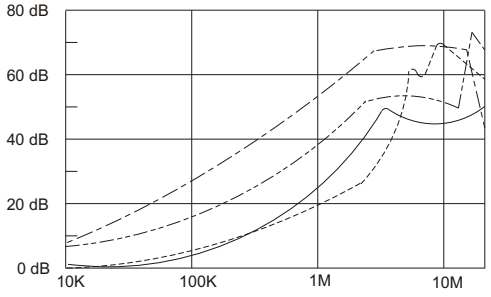


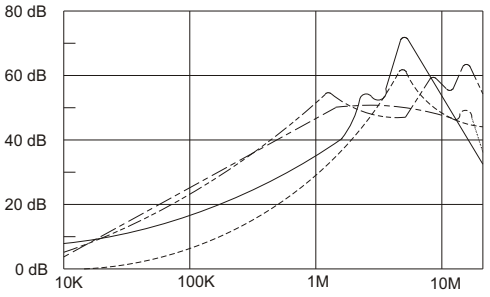

XXDBXX5B

## INSERTION LOSS (TYPICAL)

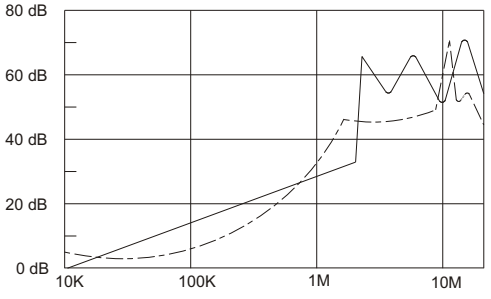
02DBAG5 ----- COMMON MODE ------- DIFF. MODE
03DBAG5 - - - COMMON MODE ——— DIFF. MODE



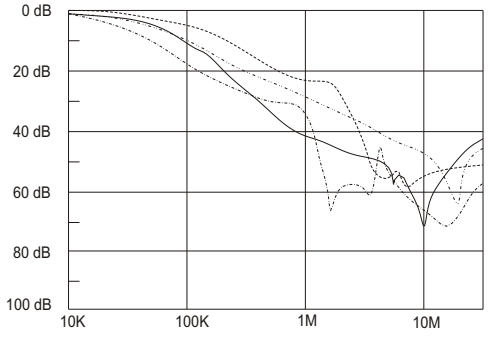

05DBAG5 ----- COMMON MODE ------- DIFF. MODE
10DBAG5 - - - COMMON MODE ——— DIFF. MODE



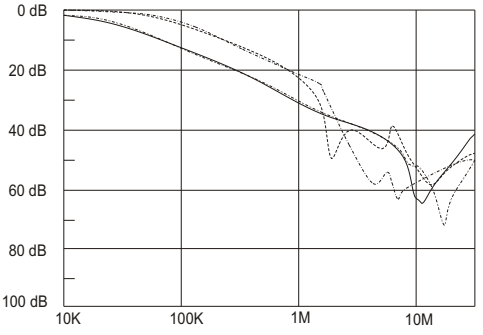

20DBAG5 - - - COMMON MODE ——— DIFF. MODE




20DBCG5B
20DBCS5B ..... COMMON MODE ..... DIFF. MODE
30DBCS5B ..... COMMON MODE ——— DIFF. MODE

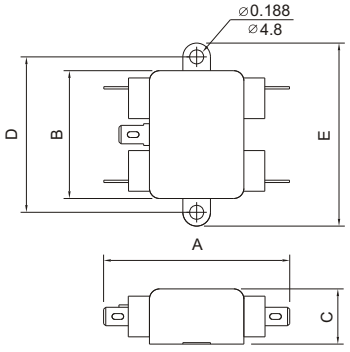


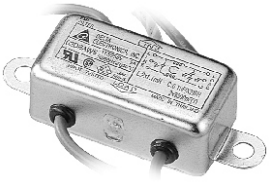

12DBBG5B
12DBBW5B ..... COMMON MODE ..... DIFF. MODE
16DBCG5B
16DBCW5B ..... COMMON MODE ——— DIFF. MODE



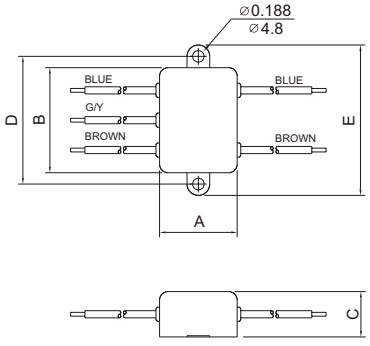
## MECHANICAL CONSTRUCTION

AG5

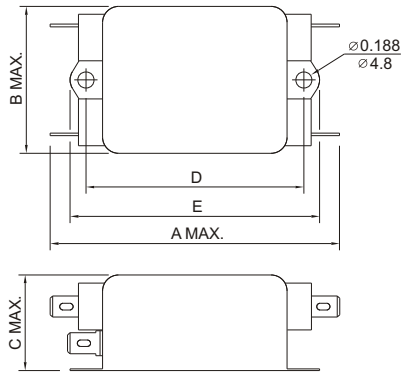


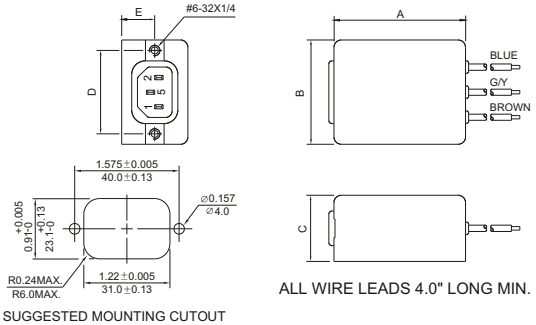
AW5



CG5



DW3S



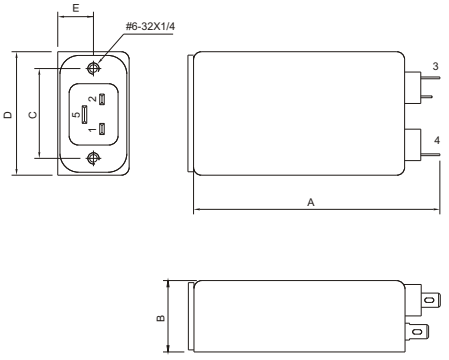

SUGGESTED MOUNTING CUTOUT

ALL WIRE LEADS 4.0" LONG MIN.

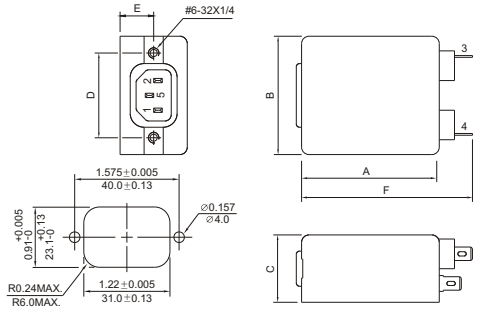
UNIT: INCH / mm

## MECHANICAL CONSTRUCTION

DG3

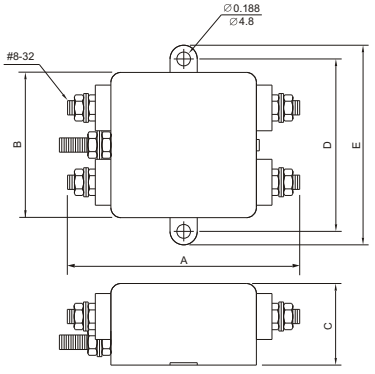


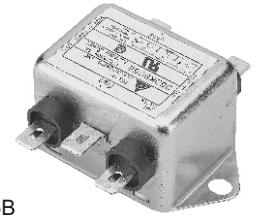
DG3S



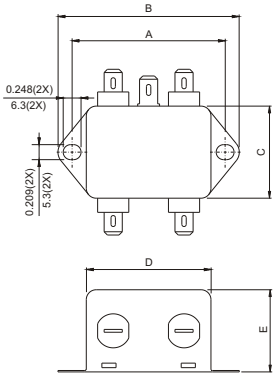

SUGGESTED MOUNTING CUTOUT

AS5



BG5B, BW5B
(option wire style)

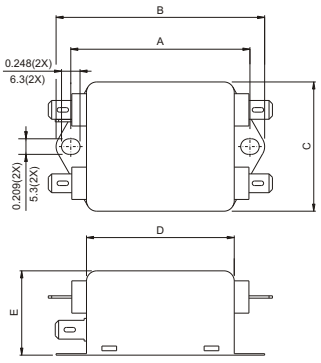




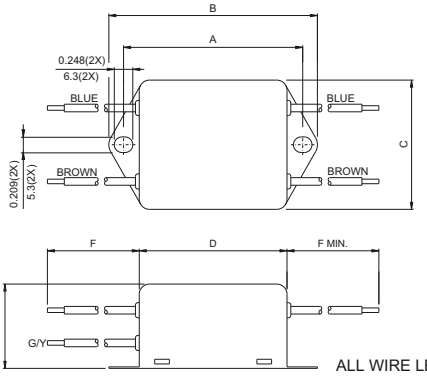

UNIT: INCH / mm

## MECHANICAL CONSTRUCTION

CG5B

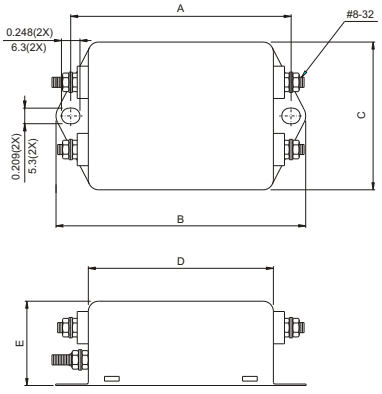


CW5B




ALL WIRE LEADS 4.0" LONG MIN.

CS5B




UNIT: INCH / mm

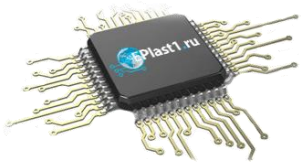
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

**Телефон:** 8 (812) 309 58 32 (многоканальный)
**Факс:** 8 (812) 320-02-42
**Электронная почта:** org@eplast1.ru
**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.