

### INTRODUCTIONS

- Effectively control EMI suppression of both line-to-line and line-to-ground noise.
- All part numbers are UL recognized, CSA certified and VDE approved.

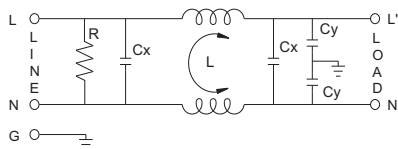
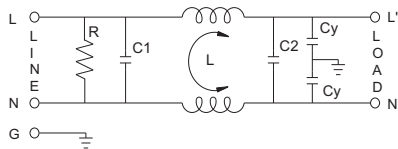
### COMPONENTS

| PART NO. | C1 (uF) | C2 (uF) | L (mH) | Cy (pF) | R (Ω) |
|----------|---------|---------|--------|---------|-------|
| 02DKAG5  | 0.22    | 0.22    | 2.1    | 3300    | 2.2M  |
| 02DKAW5  |         |         |        |         |       |
| 03DKAG5  |         |         |        |         |       |
| 03DKAW5  |         |         |        |         |       |
| 03DKDG3S |         |         |        |         |       |
| 03DKDW3S |         |         |        |         |       |
| 05DKAG5  |         |         |        |         |       |
| 05DKAS5  |         |         |        |         |       |
| 05DKAW5  |         |         |        |         |       |
| 05DKDG3S |         |         |        |         |       |
| 05DKDW3S |         |         |        |         |       |
| 10DKAG5  |         |         |        |         |       |
| 10DKAS5  |         |         |        |         |       |
| 10DKAW5  |         |         |        |         |       |
| 10DKDG3S |         |         |        |         |       |
| 10DKDW3S |         |         |        |         |       |
| *16DKCG5 | 0.47    | 0.47    | 6.0    | 10000   | 330K  |
| 20DKBG5  | 0.22    | 0.22    | 1.4    | 3300    | 2.2M  |
| 20DKBS5  |         |         |        |         |       |
| 30DKCS5  | 0.22    | 0.47    | 0.59   | 10000   | 470K  |

\* DEMKO approved only

| PART NO. | Cx (uF) | L (mH) | Cy (pF) | R (Ω) |      |
|----------|---------|--------|---------|-------|------|
| 03DKBG5B | 0.15    | 2.5    | 4700    | 1.0M  |      |
| 06DKBG5B |         | 1.0    |         | 470K  |      |
| 12DKBG5B |         | 0.7    |         | 470K  |      |
| 16DKCG5B |         | 0.65   |         | 0.65  | 1.0M |
| 16DKCW5B |         |        |         |       |      |
| 20DKCG5B |         | 0.60   |         | 0.60  | 1.0M |
| 20DKCS5B |         |        |         |       |      |
| 30DKCS5B | 0.47    | 0.67   | 10000   | 470K  |      |

### ELECTRICAL SCHEMATIC



XXDKXX5B

### SPECIFICATIONS

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

### MINIMUM INSERTION LOSS IN dB

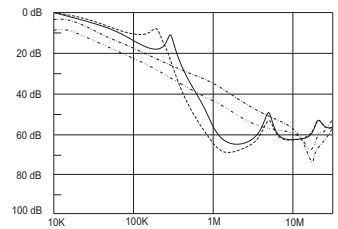
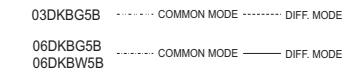
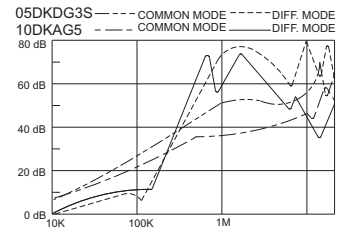
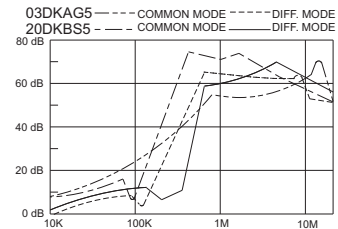
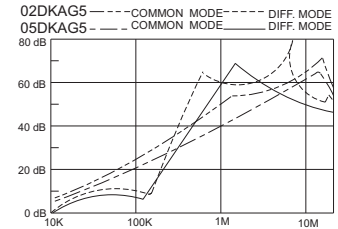
| COMMON MODE (L-G) IN 50 OHM SYSTEM       |            |               |     |     |     |    |    |
|--|------------|---------------|-----|-----|-----|----|----|
| CURRENT RATING                           | STYLE      | FREQUENCY-MHz |     |     |     |    |    |
|  |            | .15           | .50 | 1.0 | 5.0 | 10 | 30 |
| 2,3,5A                                   | AG5, AWG   | 22            | 30  | 38  | 47  | 50 | 40 |
|  | AS5        | 22            | 30  | 38  | 47  | 50 | 40 |
| 3A(S)                                    | DG3S       | 22            | 30  | 38  | 50  | 55 | 45 |
|  | DW3S       | 22            | 30  | 38  | 50  | 55 | 45 |
| 5A(S)                                    | DG3S       | 22            | 30  | 38  | 50  | 55 | 45 |
|  | DW3S       | 22            | 30  | 38  | 50  | 55 | 45 |
| 10A                                      | AG5, AS5   | 15            | 20  | 28  | 45  | 45 | 45 |
| 10A(S)                                   | AW5        | 15            | 20  | 28  | 45  | 45 | 45 |
|  | DG3S, DW3S | 15            | 20  | 28  | 45  | 45 | 45 |
| 16A                                      | CG5        | 25            | 35  | 40  | 45  | 45 | 20 |
| 20A                                      | BG5, BS5   | 14            | 19  | 28  | 40  | 42 | 35 |
| 30A                                      | CS5        | 10            | 20  | 30  | 40  | 45 | 30 |
| DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM |            |               |     |     |     |    |    |
| 2,3,5A                                   | AG5, AWG   | 22            | 30  | 38  | 47  | 50 | 40 |
|  | AS5        | 22            | 30  | 38  | 47  | 50 | 40 |
| 3A(S)                                    | DG3S       | 22            | 30  | 38  | 50  | 55 | 45 |
|  | DW3S       | 22            | 30  | 38  | 50  | 55 | 45 |
| 5A(S)                                    | DG3S       | 22            | 30  | 38  | 50  | 55 | 45 |
|  | DW3S       | 22            | 30  | 38  | 50  | 55 | 45 |
| 10A                                      | AG5, AS5   | 15            | 20  | 28  | 45  | 45 | 45 |
| 10A(S)                                   | AW5        | 15            | 20  | 28  | 45  | 45 | 45 |
|  | DG3S, DW3S | 15            | 20  | 28  | 45  | 45 | 45 |
| 16A                                      | CG5        | 25            | 35  | 40  | 45  | 45 | 20 |
| 20A                                      | BG5, BS5   | 14            | 19  | 28  | 40  | 42 | 35 |
| 30A                                      | CS5        | 10            | 20  | 30  | 40  | 45 | 30 |

| COMMON MODE (L-G) IN 50 OHM SYSTEM       |            |               |     |     |     |    |    |
|--|------------|---------------|-----|-----|-----|----|----|
| CURRENT RATING                           | STYLE      | FREQUENCY-MHz |     |     |     |    |    |
|  |            | .15           | .50 | 1.0 | 5.0 | 10 | 30 |
| 3A                                       | BG5B       | 20            | 30  | 35  | 45  | 50 | 45 |
| 6A                                       | BG5B, BW5B | 15            | 20  | 25  | 40  | 45 | 45 |
| 12A                                      | BG5B       | 10            | 20  | 22  | 35  | 45 | 40 |
| 16A                                      | CG5B, CW5B | 10            | 18  | 20  | 35  | 45 | 30 |
| 20A                                      | CG5B, CS5B | 10            | 18  | 20  | 30  | 35 | 35 |
| 30A                                      | CS5B       | 10            | 25  | 30  | 45  | 50 | 35 |
| DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM |            |               |     |     |     |    |    |
| 3A                                       | BG5B       | 7             | 35  | 50  | 45  | 45 | 45 |
| 6A                                       | BG5B, BW5B | 10            | 20  | 45  | 45  | 50 | 45 |
| 12A                                      | BG5B       | 10            | 20  | 40  | 45  | 45 | 45 |
| 16A                                      | CG5B, CW5B | 10            | 18  | 40  | 40  | 40 | 35 |
| 20A                                      | CG5B, CS5B | 10            | 12  | 35  | 35  | 40 | 40 |
| 30A                                      | CS5B       | 12            | 40  | 50  | 50  | 50 | 45 |

### SERIES DIMENSIONS

| CURRENT RATING | STYLE | DIMENSIONS IN INCHES/mm |       |       |       |      |       |      |
|----------------|-------|-------------------------|-------|-------|-------|------|-------|------|
|                |       | A                       | B     | C     | D     | E    |       |      |
| 2A             | AG5   | 2.99                    | 51.8  | 0.90  | 2.38  | 2.79 |       |      |
|                |       | 75.9                    |       |       |       |      | 22.9  |      |
|                | AW5   | 1.83                    |       | 1.16  |       |      | 60.5  | 70.9 |
| 46.5           |       |                         |       |       |       |      |       |      |
| 3A             | AG5   | 2.99                    |       | 1.29  |       |      | 1.575 | 0.61 |
|                |       | 75.9                    |       |       |       |      |       |      |
|                | AW5   | 1.83                    |       | 1.29  | 1.575 | 0.61 |       |      |
|                |       | 46.5                    |       |       |       |      |       |      |
|                | DG3S  | 3.14                    |       | 1.29  | 1.575 | 0.61 |       |      |
|                |       | 79.8                    |       |       |       |      |       |      |
| DW3S           | 2.55  | 1.29                    |       | 1.575 | 0.61  |      |       |      |
|                | 64.8  |                         |       |       |       |      |       |      |
| 5A             | AG5   | 2.99                    | 51.8  | 1.16  | 2.38  | 2.79 |       |      |
|                |       | 75.9                    |       |       |       |      | 29.5  | 60.5 |
|                | AW5   | 1.83                    |       | 1.29  |       |      | 1.575 | 0.61 |
|                |       | 46.5                    |       |       |       |      |       |      |
|                | AS5   | 3.37                    |       | 1.29  |       |      | 1.575 | 0.61 |
|                |       | 85.6                    |       |       |       |      |       |      |
| DG3S           | 3.14  | 1.29                    | 1.575 | 0.61  |       |      |       |      |
|                | 79.8  |                         |       |       |       |      |       |      |
| DW3S           | 2.55  | 1.29                    | 1.575 | 0.61  |       |      |       |      |
|                | 64.8  |                         |       |       |       |      |       |      |
| 10A            | AG5   | 3.25                    | 58.4  | 1.16  | 2.38  | 2.79 |       |      |
|                |       | 82.5                    |       |       |       |      | 29.5  | 60.5 |
|                | AW5   | 2.08                    |       | 1.29  |       |      | 1.575 | 0.61 |
|                |       | 52.8                    |       |       |       |      |       |      |
|                | AS5   | 3.37                    |       | 1.29  |       |      | 1.575 | 0.61 |
|                |       | 85.6                    |       |       |       |      |       |      |
| DG3S           | 3.22  | 1.29                    | 1.575 | 0.61  |       |      |       |      |
|                | 81.5  |                         |       |       |       |      |       |      |
| DW3S           | 2.63  | 1.29                    | 1.575 | 0.61  |       |      |       |      |
|                | 66.8  |                         |       |       |       |      |       |      |
| 16A            | CG5   | 3.75                    | 2.06  | 1.54  | 2.94  | 3.34 |       |      |
|                |       | 95.3                    | 52.3  | 39.1  | 74.7  | 84.8 |       |      |
| 20A            | BG5   | 3.25                    | 64.0  | 1.54  | 2.94  | 3.36 |       |      |
|                |       | 82.5                    |       |       |       | 85.3 |       |      |
|                | BS5   | 3.37                    |       |       |       | 3.37 |       |      |
| 85.6           |       | 85.6                    |       |       |       |      |       |      |
| 30A            | CS5   | 3.87                    | 2.04  | 1.54  | 2.94  | 3.36 |       |      |
|                |       | 98.3                    | 51.8  |       |       | 85.3 |       |      |

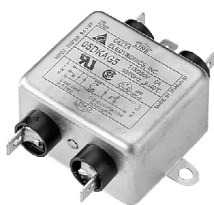
### INSERTION LOSS (TYPICAL)



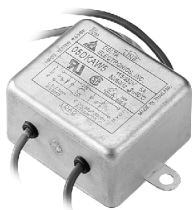
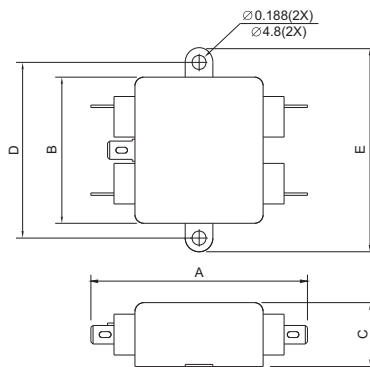
**SERIES DIMENSIONS**

| CURRENT RATING | STYLE | DIMENSIONS IN INCHES/mm |               |              |              |               |   |
|----------------|-------|-------------------------|---------------|--------------|--------------|---------------|---|
|                |       | A                       | B             | C            | D            | E             | F |
| 3A             | BG5B  | 2.13<br>54.0            | 2.54<br>64.5  | 1.34<br>34.0 | 1.77<br>45.0 | 1.18<br>30.0  | - |
| 6A             | BG5B  |                         |               |              |              |               | - |
| 12A            | BG5B  |                         |               |              |              |               | - |
| 16A            | CG5B  | 2.40<br>61.0            | 2.81<br>71.5  | 1.79<br>45.5 | 2.02<br>51.3 | 3.94<br>100.0 | - |
|                | CW5B  | -                       |               |              |              |               |   |
| 20A            | CG5B  | 2.95<br>75.0            | 3.34<br>84.8  | 2.04<br>51.8 | 2.52<br>64.0 | 3.94<br>100.0 | - |
|                | CS5B  | -                       |               |              |              |               |   |
| 30A            | CS5B  | 4.06<br>103.0           | 4.49<br>114.0 | 2.22<br>56.5 | 3.74<br>95.0 | 1.83<br>46.4  | - |

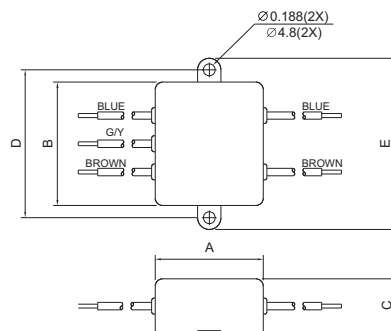
**MECHANICAL CONSTRUCTION**



AG5



AW5



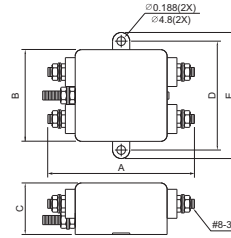
WIRE LENGTH : 4.0" MIN.

UNIT:  $\frac{\text{INCH}}{\text{mm}}$

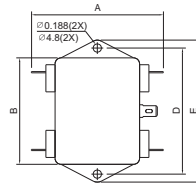
**MECHANICAL CONSTRUCTION**



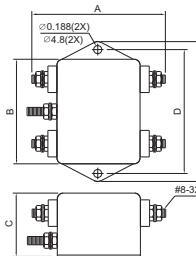
AS5



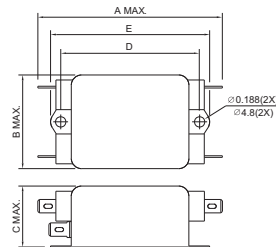
BG5



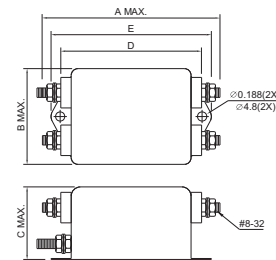
BS5



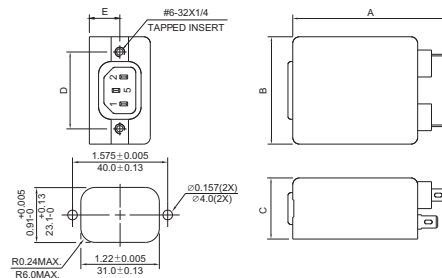
CG5



CS5



DG3S



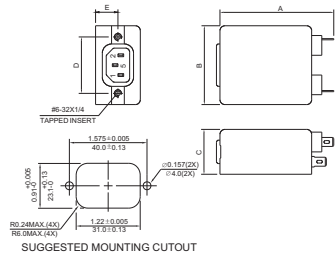
SUGGESTED MOUNTING CUTOUT

UNIT: INCH  
mm

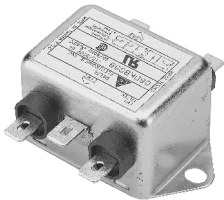
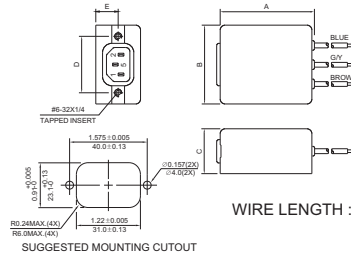
# MECHANICAL CONSTRUCTION



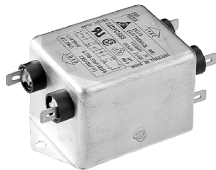
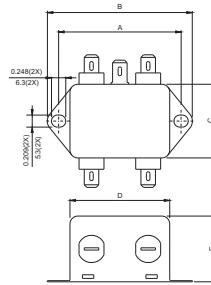
DG3



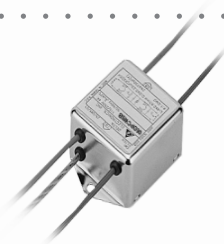
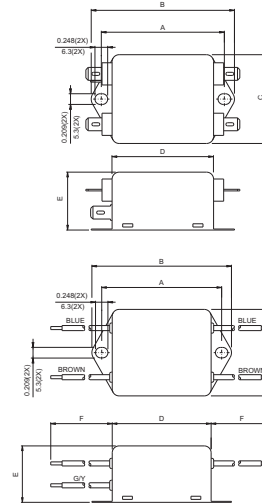
DW3S



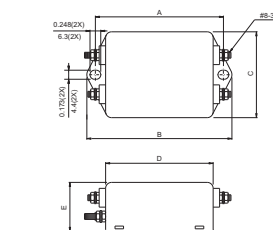
BG5B  
(option wire style)



CG5B



CW5B



CS5B

GENERAL PURPOSE ONE-STAGE FILTERS