

# DK SERIES GENERAL PURPOSE FILTERS



## 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.

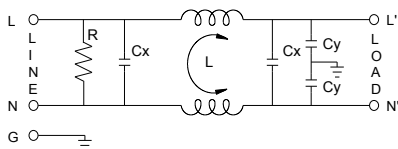
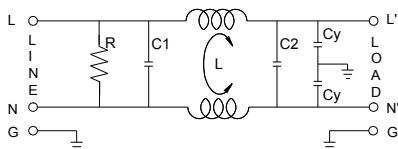
## COMPONENTS

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					
15DKDG3	0.68X3	-	3.6	10000	200K
* 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
03DKBW5B				
06DKBG5B				
06DKBW5B				
12DKBG5B				
12DKBW5B				
16DKCG5B				
16DKCW5B				
20DKCG5B				
20DKCS5B				
30DKCS5B	0.47	0.67	10000	470K

## ELECTRICAL SCHEMATIC



XXDKXX5B

## SPECIFICATIONS

- Maximum leakage current each  
line-to-ground @ 115VAC 60Hz: 0.25mA  
1.0mA (10000pF)  
@ 250VAC 50Hz: 0.45mA  
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

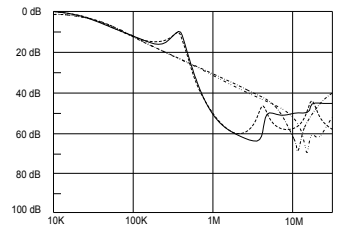
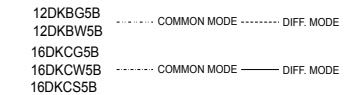
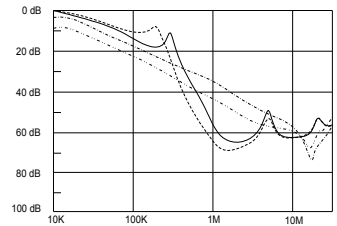
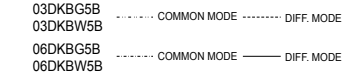
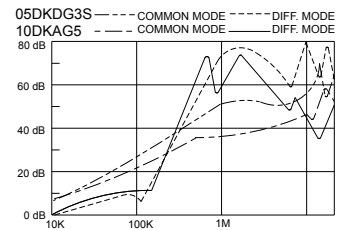
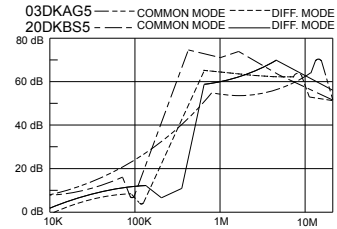
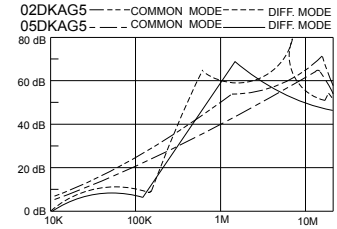
COMMON MODE (L-G) IN 50 OHM SYSTEM						
CURRENT RATING	STYLE	FREQUENCY-MHz				
		.15	.50	1.0	5.0	10 30
2, 3, 5A		22	30	38	47	50 40
3A (S), 5A (S)		22	30	38	50	55 45
10A,10A (S)		15	20	28	45	45 45
15A		20	30	35	45	50 35
16A		25	35	40	45	45 20
20A		14	19	28	40	42 35
30A		10	20	30	40	45 30
DIFFERENTIAL MODE (L-L) IN 50 OHM SYSTEM						
2, 3, 5A		10	46	48	50	50 45
3A (S), 5A (S)		12	46	48	55	50 45
10A,10A (S)		8	38	55	45	45 45
15A		10	40	50	50	50 50
16A		20	50	50	50	40 30
20A		10	35	50	50	45 40
30A		10	30	50	45	35 40

COMMON MODE (L-G) IN 50 OHM SYSTEM						
CURRENT RATING	STYLE	FREQUENCY-MHz				
		.15	.50	1.0	5.0	10 30
3A	BG5B, BW5B	20	30	35	45	50 45
6A	BG5B, BW5B	15	20	25	40	45 45
12A	BG5B, BW5B	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, BW5B	7	35	50	45	45 45
6A	BG5B, BW5B	10	20	45	45	50 45
12A	BG5B, BW5B	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	2.04 51.8	0.90 22.9	2.38 60.5	2.79 70.9
		75.9				
AW5	1.83					
	46.5					
3A	AG5	2.99				
		75.9				
	AW5	1.83				
		46.5				
	DG3S	3.14				
		79.8				
DW3S	2.55					
	64.8					
5A	AG5	2.99				
		75.9				
	AW5	1.83				
		46.5				
	AS5	3.37				
		85.6				
DG3S	3.14					
	79.8					
DW3S	2.55					
	64.8					
10A	AG5	3.25				
		82.5				
	AW5	2.08				
		52.8				
	AS5	3.37				
		85.6				
DG3S	3.22					
	81.5					
DW3S	2.63					
	66.8					
15A	DG3	4.35	2.22	1.29	1.575	0.63
110.5		56.4	32.8	40.01	16.0	
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	2.52 64.0	1.54 39.1	2.94 74.7	3.36
		82.5				85.3
	BS5	3.37				3.37
		85.6				85.6
30A	CS5	3.87	2.04			3.36
		98.3	51.8			85.3

**INSERTION LOSS (TYPICAL)**



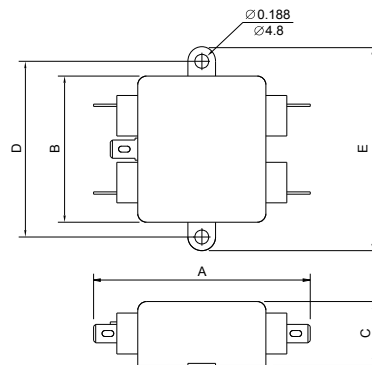
GENERAL PURPOSE ONE-STAGE FILTERS

**SERIES DIMENSIONS**

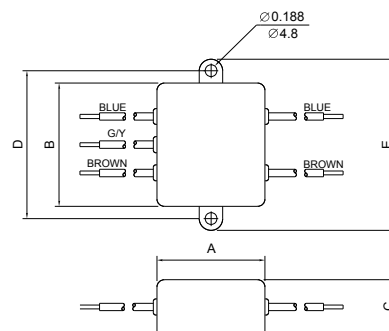
CURRENT RATING	STYLE	DIMENSIONS IN INCHES/mm					
		A	B	C	D	E	F
3A	BG5B	2.13	2.54	1.34	1.77	1.18 30.0	-
	BW5B						$\frac{3.94}{100.0}$
6A	BG5B	54.00	64.5	34.0	45.0	1.18 30.0	-
	BW5B						$\frac{3.94}{100.0}$
12A	BG5B						-
	BW5B						$\frac{3.94}{100.0}$
16A	CG5B	61.00	71.5	45.5	51.3		-
	CW5B						$\frac{3.94}{100.0}$
20A	CG5B	75.00	84.8	51.8	64.0		-
	CS5B						
30A	CS5B	103.00	114.0	56.5	95.0	46.4	-

**MECHANICAL CONSTRUCTION**

AG5



AW5

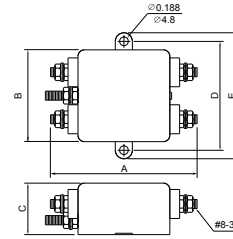


ALL WIRE LEADS 4.0" LONG MIN.

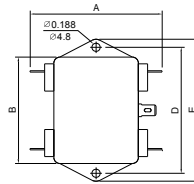
UNIT:  $\frac{\text{INCH}}{\text{mm}}$

**MECHANICAL CONSTRUCTION**

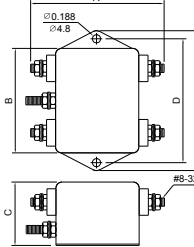
AS5



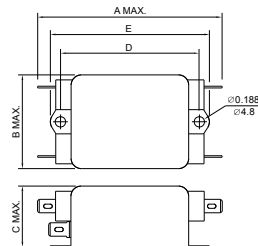
BG5



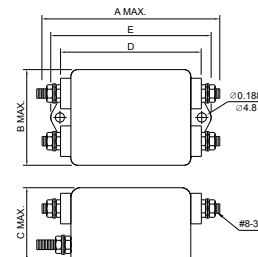
BS5



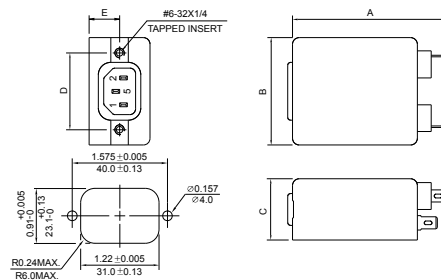
CG5



CS5



DG3S



UNIT: INCH  
mm

SUGGESTED MOUNTING CUTOUT

**MECHANICAL CONSTRUCTION**



DG3



DW3S



BG5B, BW5B  
(option wire style)



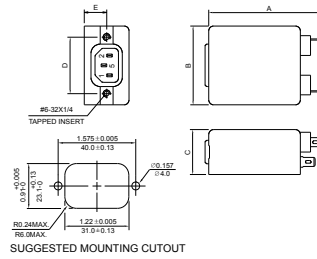
CG5B



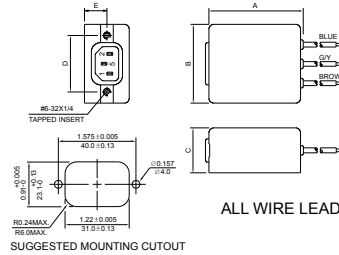
CW5B



CS5B

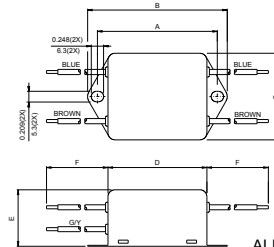
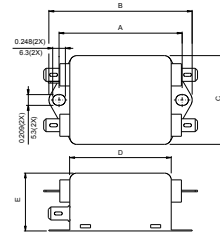
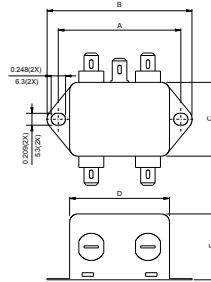


SUGGESTED MOUNTING CUTOUT

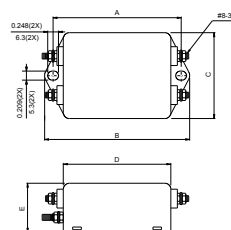


SUGGESTED MOUNTING CUTOUT

ALL WIRE LEADS 4.0" LONG MIN.



ALL WIRE LEADS 4.0" LONG MIN.



UNIT: INCH  
mm