

PK Series

CHASSIS MOUNT, HIGH PERFORMANCE, MULTIPURPOSE,
SINGLE STAGE EMI/RFI LINE FILTER.



FEATURES

The PK series offers a wide variety of EMI filters in numerous styles of packages and current ratings. The filters are effective in reducing both Line-to-Line and Line-to-Ground noise up to 30 Amp at 250VAC. This series offers very low leakage current suitable for medical and non-medical applications.

These filters are also available for Medical applications. The absence of C(y) capacitors offers extremely low leakage current to comply with various industry standards especially the medical equipment with Switching power supplies.

A Bleeder resistor can also be added to prevent excessive voltages from developing across the filter capacitors when there is no load.

APPLICATIONS

Computer & networking equipment, Measuring & control equipment, Data processing equipment, laboratory instruments, Switching power supplies, other electronic equipment.

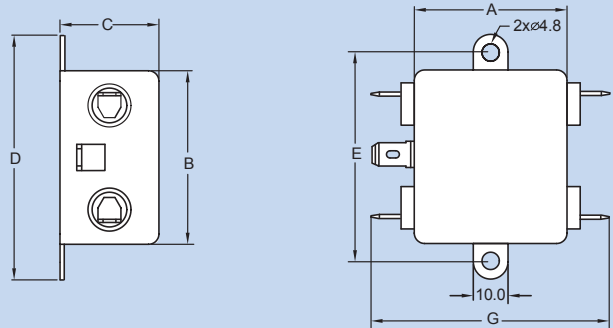
TECHNICAL DATA

- Rated Voltage: 115/250VAC
- Rated Current: 1A, 2A, 3A, 5A, 6A, 10A, 15A, 20A, 30A
- Power Line Frequency: 50/60Hz
- Max. Leakage Current each
Line to Ground:
 - @ 115VAC 60Hz: 0.25mA
 - @ 250VAC 50Hz: 0.45mA
 - @ 115VAC 60Hz: 2 μ A*
 - @ 250VAC 50Hz: 5 μ A*
- Hipot Rating (one minute)
 - Line to Ground: 2250VDC
 - Line to Line: 1450VDC
- Temperature Range: -25C to +85C

* Medical application

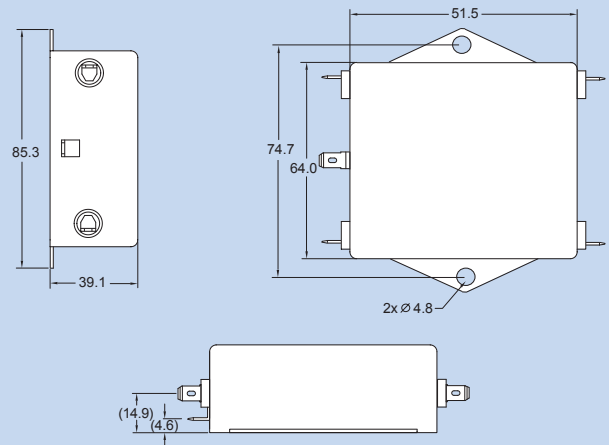
MECHANICAL DIMENSIONS (Unit: mm)

A1, A2, A3

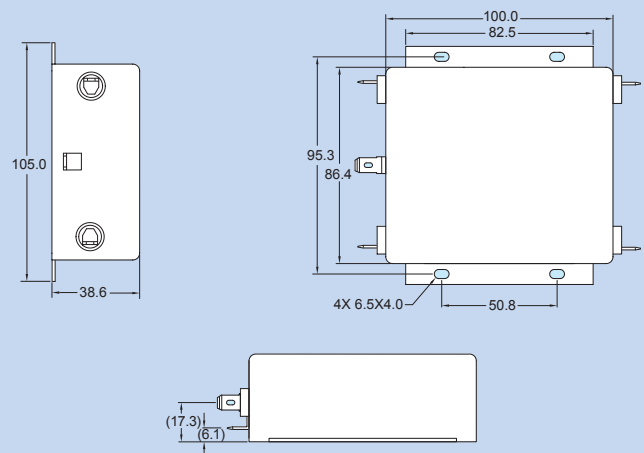


CASE CODE	DIMENSIONS						
	A	B	C	D	E	F	G
A1	24.4	45.0	17.5	64.5	54.1	8.5	49.6
A2	33.8	45.0	30.0	64.5	54.5	14.9	59.0
A3	46.5	51.8	30.0	70.9	60.9	14.9	71.7

B1



G1




Specifications subject to change without notice. Dimensions (mm).

PK Series Example & Ordering Code

PK 01 Q - 50 - 1 C

CURRENT RATING (A):

- = 01
- = 02
- = 03
- = 05
- = 06
- = 10
- = 15
- = 20
- = 30

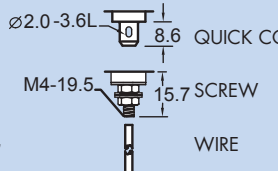


TERMINAL:

6.3/0.25 $\varnothing 2.0-3.6L$ 8.6 QUICK CONNECT = Q

M4-19.5 15.7 SCREW = PS

UL 1015, 18AWG STRANDED, 4" WIRE = W



OPTIONS:

NO BLEEDER RESISTOR = 00

BLEEDER RESISTOR (1 W, 1M) = 50

COMPONENT LOCATIONS:

STANDARD TYPE = 1

WITHOUT C(X); C(Y) ONLY = 2+

C(X); C(Y) BEHIND L = 3+

WITHOUT C(Y); C(X) ONLY = 1M

WITHOUT C(Y); C(X) BEHIND L = 2M+

ATTENUATION CODE TABLE:

Non-Medical applications: Select the Attenuation Code with corresponding component values and case code.

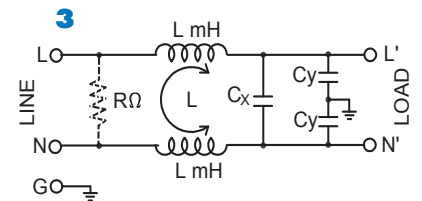
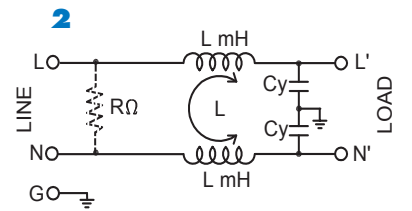
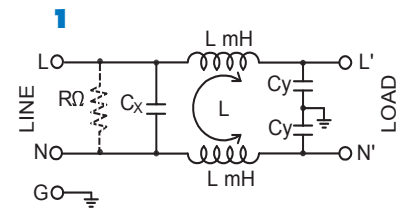
Case Code	Cap. Cx (μF)	Cap. Cy (μF)	Inductance Per Current Rating (mH)									
			1A	2A	3A	5A	6A	10A	15A	20A	30A	
A1	0.033	2200	10.0	2.5	1.2	1.0	0.8	0.3	*	*	*	
A1	0.1	3300	10.0	2.5	1.2	1.0	0.8	0.3	*	*	*	
A2	0.033	2200	15.0	2.5	2.0	1.2	0.8	1.0	0.8	0.6	*	
A2	0.1	3300	15.0	2.5	2.0	1.2	0.8	1.0	0.8	0.6	*	
A3	0.033	2200	20.0	10.0	8.0	4.0	2.0	1.2	0.9	0.7	0.3	
A3	0.1	3300	20.0	10.0	8.0	4.0	2.0	1.2	0.9	0.7	0.3	
B1	0.033	2200	*	*	*	*	*	1.5	*	0.9	0.3	
B1	0.1	3300	*	*	*	*	*	1.5	*	0.9	0.3	
G1	0.033	2200	*	*	*	*	*	4.0	3.0	2.0	*	
G1	0.1	3300	*	*	*	*	*	4.0	3.0	2.0	*	
G1	0.1	4700	*	*	*	*	*	*	*	*	0.5	

Medical applications: Select the Attenuation Code with corresponding component values and case code.

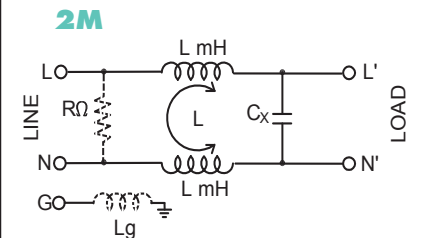
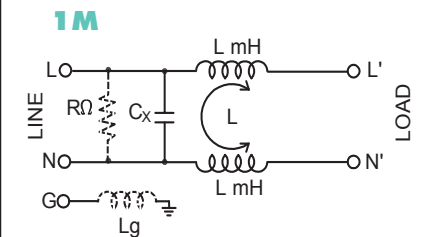
Case Code	Cap. Cx (μF)	Inductance Per Current Rating (mH)									
		1A	2A	3A	5A	6A	10A	15A	20A	30A	
A1	0.033	10.0	2.5	1.2	1.0	0.8	0.3	*	*	*	
A1	0.1	10.0	2.5	1.2	1.0	0.8	0.3	*	*	*	
A2	0.033	15.0	2.5	2.0	1.2	0.8	1.0	0.8	0.6	*	
A2	0.1	15.0	2.5	2.0	1.2	0.8	1.0	0.8	0.6	*	
A3	0.033	20.0	10.0	8.0	4.0	2.0	1.2	0.9	0.7	0.3	
A3	0.1	20.0	10.0	8.0	4.0	2.0	1.2	0.9	0.7	0.3	
B1	0.033	*	*	*	*	*	1.5	*	0.9	0.3	
B1	0.1	*	*	*	*	*	1.5	*	0.9	0.3	
G1	0.033	*	*	*	*	*	4.0	3.0	2.0	1.5	
G1	0.1	*	*	*	*	*	4.0	3.0	2.0	1.5	
G1	*	*	*	*	*	*	*	*	*	0.5	

* Contact PDI *Contact PDI for attenuation numbers * Q or PS option only

SCHEMATICS



MEDICAL SCHEMATICS



PK Series Attenuation Tables

Non-Medical Applications*

Insertion loss in dB (50 Ohm circuit)

Attenuation Code	Current Rating	Comm. Mode(L-G) in MHz					Diff. mode(L-L) in MHz						
		.15	.5	1	5	10 30	.15	.5	1	5	10 30		
A	1A	39	29	42	48	49	38	2	18	30	62	61	22
	2A	28	36	40	46	49	40	1	9	17	58	60	17
	3A	20	28	32	44	50	43	1	8	14	49	66	32
	5A	21	30	35	48	51	49	1	8	14	42	53	26
	6A	18	23	28	45	51	45	1	8	14	45	61	30
	10A	11	17	21	37	43	37	1	8	14	33	59	27
B	1A	40	32	45	52	55	38	10	29	41	71	56	23
	2A	28	37	46	50	54	42	8	19	27	67	58	16
	3A	20	25	30	50	57	45	8	19	26	65	64	35
	5A	22	31	38	52	56	51	8	18	24	49	53	27
	6A	18	25	30	49	57	47	8	18	24	53	53	30
	10A	11	18	24	40	52	38	8	18	24	44	49	30
C	1A	42	60	55	49	48	57	3	21	34	65	64	13
	2A	26	30	47	48	49	42	1	12	23	66	63	23
	3A	24	29	34	47	50	47	1	10	20	64	63	24
	5A	14	17	20	37	46	40	1	8	16	57	63	28
	6A	15	18	22	37	45	40	1	8	15	57	60	29
	10A	19	25	28	44	50	43	1	8	15	61	60	30
D	1A	43	64	56	53	54	47	12	32	45	74	60	11
	2A	26	31	45	51	52	42	7	21	33	81	61	22
	3A	24	30	59	51	56	48	8	20	31	73	59	23
	5A	14	18	23	42	51	39	8	18	26	56	56	29
	6A	15	20	25	41	52	40	8	18	25	59	54	29
	10A	19	26	31	49	56	44	8	18	25	64	60	30
E	1A	47	54	44	38	39	42	3	21	34	55	60	26
	2A	36	48	49	44	44	44	3	21	33	59	59	33
	3A	36	39	47	41	41	31	2	19	31	55	59	33
	5A	29	32	57	49	50	45	1	13	25	68	64	18
	6A	24	28	34	47	50	45	1	10	20	62	64	24
	10A	14	17	20	37	45	41	1	8	16	60	61	30
F	1A	47	50	44	41	44	43	12	32	44	59	55	26
	2A	36	66	50	48	52	46	11	31	44	66	54	32
	3A	36	56	49	47	51	36	10	29	42	63	52	34
	5A	29	33	48	54	55	48	8	24	36	80	61	18
	6A	24	30	59	51	56	49	8	20	31	74	62	25
	10A	14	17	20	35	45	37	8	19	27	55	55	29
G	1A	15	19	22	40	49	42	1	9	18	62	61	29
	2A	19	23	27	42	48	43	1	8	15	65	57	27
	3A	11	17	22	35	42	38	2	8	14	35	55	28
	5A	16	20	31	43	53	43	8	19	29	63	57	29
	20A	19	24	30	45	53	44	8	18	25	60	58	28
	30A	11	18	24	40	50	36	8	18	24	53	51	28
H	10A	26	30	54	46	48	52	1	11	21	63	60	14
	20A	26	30	47	48	50	47	5	19	30	71	57	20
	30A	21	26	33	43	46	45	1	7	16	58	59	20
I	10A	26	30	54	46	48	52	1	11	21	63	60	14
	20A	26	30	47	48	50	47	5	19	30	71	57	20
	30A	21	26	33	43	46	45	1	7	16	58	59	20
J	10A	26	31	45	50	52	50	5	21	32	77	55	14
	20A	23	28	42	48	50	47	5	19	30	71	57	20
	30A	21	27	56	48	52	45	5	18	27	69	56	21

*This table applies to schematic 1 only. Visit our website or contact PDI for attenuation numbers.

Medical Applications*

Insertion loss in dB (50 Ohm circuit)

Attenuation Code	Current Rating	Comm. Mode(L-G) in MHz					Diff. mode(L-L) in MHz						
		.15	.5	1	5	10 30	.15	.5	1	5	10 30		
M0	1A	38	42	41	38	23	21	4	22	33	51	42	33
	2A	25	28	34	36	31	27	2	11	20	39	40	26
	3A	21	26	27	28	26	27	2	10	18	61	48	28
	5A	19	23	24	25	23	27	8	19	27	53	45	27
	6A	18	22	23	25	23	19	2	9	16	44	47	28
	10A	11	17	18	18	17	13	2	9	15	35	42	27
M1	1A	37	41	41	38	23	22	12	31	42	50	41	33
	2A	28	34	36	36	31	28	8	20	29	44	43	26
	3A	21	26	27	28	26	27	8	19	28	50	47	27
	5A	19	24	27	39	46	39	8	19	27	53	45	27
	6A	18	23	26	39	47	33	2	9	16	44	47	28
	10A	11	17	18	18	17	13	8	18	24	58	40	27
M2	1A	44	50	46	22	28	23	4	23	35	58	48	11
	2A	27	34	36	28	23	21	2	10	18	44	44	15
	3A	25	30	31	27	27	20	2	11	20	44	42	23
	5A	14	17	18	21	21	23	2	10	18	44	42	26
	6A	15	18	19	21	20	25	2	9	17	48	40	27
	10A	18	22	24	25	23	19	2	9	16	50	43	26
M3	1A	44	50	46	23	28	23	12	32	45	63	49	11
	2A	27	34	36	28	23	21	8	20	29	62	49	14
	3A	25	30	31	27	27	20	8	20	29	44	42	26
	5A	14	17	18	21	21	23	8	19	27	42	40	26
	6A	15	18	19	21	20	25	8	19	28	46	40	27
	10A	18	22	24	25	23	19	8	19	26	49	43	27
M4	1A	47	46	40	20	19	17	4	22	32	43	33	20
	2A	37	41	40	18	25	23	4	22	33	51	40	30
	3A	39	47	44	27	36	9	2	18	29	48	43	30
	5A	30	34	36	31	18	19	2	14	24	44	43	17
	6A	25	29	30	30	25	20	2	11	22	53	50	23
	10A	14	17	18	21	20	24	2	9	18	45	43	27
M5	1A	47	46	40	20	19	17	12	30	40	43	33	19
	2A	37	41	40	18	25	23	11	31	43	54	41	30
	3A	39	47	44	27	36	9	10	27	38	49	42	30
	5A	30	34	36	31	18	19	8	23	33	44	42	17
	6A	25	29	30	30	25	20	8	21	32	58	49	24
	10A	14	17	18	21	20	24	8	19	27	43	40	26
M6	1A	19	23	24	25	23	28	8	19	27	50	44	26
	2A	16	20	21	24	24	20	8	19	26	45	41	33
	3A	12	19	22	22	20	15	8	18	24	40	40	27
	10A	22	27	28	29	26	23	2	10	18	52	44	24
	20A	19	23	24	25	23	26	2	9	17	49	44	25
	30A	12	19	22	22	20	15	2	9	15	31	36	27
M7	10A	22	27	28	29	26	23	8	19	29	54	49	25
	20A	19	23	24	25	23	26	8	19	27	49	43	24
	30A	12	19	22	22	20	15	8	18	24	40	40	27
M8	10A	30	34	36	31	24	15	2	14	25	43	42	13
	20A	27	31	32	31	25	18	2	13	24	52	49	21
	30A	25	29	30	30	25	19	2	11	21	54	50	22
M9	10A	30	34	36	31	24	15	9	23	33	42	40	15
	20A	27	31	32	31	25	18	8	23	34	60	51	23
	30A	25	29	30	30	25	19	8	21	32	58	50	22

*This table applies to schematic 1M only. Visit our website or contact PDI for attenuation numbers.