

# RP210

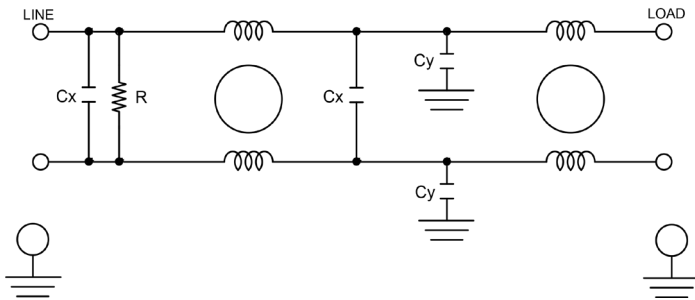
## COMPACT DUAL STAGE POWER LINE FILTER

### FEATURES

- » Rated currents include **3A, 6A, 10A, and 16A**
- » Dual Stage Line Filter
- » Available with **QD** tabs, **W** (wireleads), and **S** (studs) option
- » Compact Design
- » Agency Approved to UL1283 / 60929, CSA C22.2, EN 60939
- » Y-cap value can be adjusted to fit specifications



### ELECTRICAL SCHEMATIC



### SPECIFICATIONS

OPERATING FREQUENCY	50/60Hz
USABLE FREQUENCY	DC - 400 Hz
MAX. OPERATING VOLTAGE*	250V +10%
AMBIENT TEMPERATURE	-25 TO 40°C
CLIMATIC CATEGORY	25/100/21
TERMINALS (-T)	QD: 0.25" TABS WIRE LEADS STUD (M4)
TYP. WEIGHT, LBS (KG)	0.1 (0.05)

### TYPICAL LEAKAGE CURRENT

@ 250 VAC 50 Hz	0 - 1.80 mA Max.
@ 120 VAC 60 Hz	0 - 0.90 mA Max.

### HIPOT RATINGS

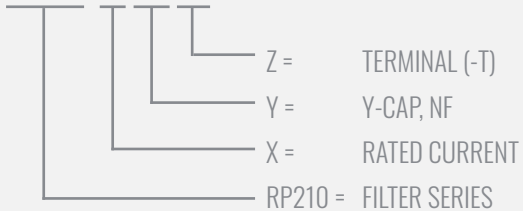
LINE TO GROUND	2700 VDC
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### TYPICAL APPLICATIONS

- ✓ Household Appliances
- ✓ Industrial Automation Equipment
- ✓ Medical Devices
- ✓ Office Electronics
- ✓ Electronic Devices
- ✓ Noisy Applications

### HOW TO ORDER

RP210-X-Y-Z



**NOTE:** USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS  
E.G. **RP210-10-4.7-W** (10AMPS WITH 4.7 NF YCAP)

For **X, Y** and **Z** options see product specification table.

# RP210

## COMPACT DUAL STAGE POWER LINE FILTER

MODEL NO.	RATED CURRENT, A @ 40° C	Y-CAP, nF	LEAKAGE CURRENT, mA @ 250V AC, 50 Hz / @ 120V AC, 60 Hz		TERMINAL OPTIONS			MAX. DIMENSIONS" (MM)		
					(W) INPUT/ OUTPUT	(S) INPUT/ OUTPUT	(C) INPUT/ OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP210-3-0-QD	3	0	-	-	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-3-0-W	3	0	-	-		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-3-.47-QD	3	0.47	0.07	0.04	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-3-.47-W	3	0.47	0.07	0.04		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-3-1-QD	3	1	0.15	0.09	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-3-1-W	3	1	0.15	0.09		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-3-2.2-QD	3	2.2	0.34	0.19	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-3-2.2-W	3	2.2	0.34	0.19		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-3-4.7-QD	3	4.7	0.73	0.42	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-3-4.7-W	3	4.7	0.73	0.42		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-3-10-QD	3	10	1.57	0.90	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-3-10-W	3	10	1.57	0.90		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-6-0-QD	6	0	-	-	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-6-0-W	6	0	-	-		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-6-.47-QD	6	0.47	0.07	0.04	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-6-.47-W	6	0.47	0.07	0.04		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-6-1-QD	6	1	0.15	0.09	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-6-1-W	6	1	0.15	0.09		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-6-2.2-QD	6	2.2	0.34	0.19	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-6-2.2-W	6	2.2	0.34	0.19		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-6-4.7-QD	6	4.7	0.73	0.42	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-6-4.7-W	6	4.7	0.73	0.42		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-6-10-QD	6	10	1.57	0.90	✓			1.85" (47)	2.93" (74.4)	1.18" (30)
RP210-6-10-W	6	10	1.57	0.90		✓		1.85" (47)	2.80" (71)	1.18" (30)
RP210-10-0-QD	10	0	-	-	✓			2.05" (52)	3.47" (88.25)	1.22" (31)
RP210-10-0-W	10	0	-	-		✓		2.01" (51)	3.35" (85)	1.22" (31)
RP210-10-.47-QD	10	0.47	0.07	0.04	✓			2.05" (52)	3.47" (88.25)	1.22" (31)
RP210-10-.47-W	10	0.47	0.07	0.04		✓		2.01" (51)	3.35" (85)	1.22" (31)
RP210-10-1-QD	10	1	0.15	0.09	✓			2.05" (52)	3.47" (88.25)	1.22" (31)
RP210-10-1-W	10	1	0.15	0.09		✓		2.01" (51)	3.35" (85)	1.22" (31)
RP210-10-2.2-QD	10	2.2	0.34	0.19	✓			2.05" (52)	3.47" (88.25)	1.22" (31)
RP210-10-2.2-W	10	2.2	0.34	0.19		✓		2.01" (51)	3.35" (85)	1.22" (31)
RP210-10-4.7-QD	10	4.7	0.73	0.42	✓			2.05" (52)	3.47" (88.25)	1.22" (31)
RP210-10-4.7-S	10	4.7	0.73	0.42			✓	2.05" (52)	3.90" (99)	1.22" (31)

ADDITIONAL MODEL NO. >>

# RP210

## COMPACT DUAL STAGE POWER LINE FILTER

MODEL NO.	RATED CURRENT, A @ 40° C	Y-CAP, nF	LEAKAGE CURRENT, mA @ 250V AC, 50 Hz / @ 120V AC, 60 Hz		TERMINAL OPTIONS			MAX. DIMENSIONS" (MM)		
					(W) INPUT/ OUTPUT	(S) INPUT/ OUTPUT	(C) INPUT/ OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP210-10-4.7-W	10	4.7	0.73	0.42		✓		2.01" (51)	3.35" (85)	1.22" (31)
RP210-10-10-QD	10	10	1.57	0.90	✓			2.05" (52)	3.47" (88.25)	1.22" (31)
RP210-10-10-W	10	10	1.57	0.90		✓		2.01" (51)	3.35" (85)	1.22" (31)
RP210-16-0-QD	16	0	-	-	✓			2.05" (52)	3.45" (87.7)	1.61" (41)
RP210-16-0-S	16	0	-	-			✓	2.05" (52)	3.90" (99)	1.61" (41)
RP210-16-0-W	16	0	-	-		✓		2.05" (52)	3.35" (85)	1.57" (40)
RP210-16-4.7-QD	16	0.47	0.73	0.42	✓			2.05" (52)	3.45" (87.7)	1.61" (41)
RP210-16-4.7-S	16	0.47	0.73	0.42			✓	2.05" (52)	3.90" (99)	1.61" (41)
RP210-16-4.7-W	16	0.47	0.73	0.42		✓		2.05" (52)	3.35" (85)	1.57" (40)
RP210-16-1-QD	16	1	0.15	0.09	✓			2.05" (52)	3.45" (87.7)	1.61" (41)
RP210-16-1-S	16	1	0.15	0.09			✓	2.05" (52)	3.90" (99)	1.61" (41)
RP210-16-1-W	16	1	0.15	0.09		✓		2.05" (52)	3.35" (85)	1.57" (40)
RP210-16-2.2-QD	16	2.2	0.34	0.19	✓			2.05" (52)	3.45" (87.7)	1.61" (41)
RP210-16-2.2-S	16	2.2	0.34	0.19			✓	2.05" (52)	3.90" (99)	1.61" (41)
RP210-16-2.2-W	16	2.2	0.34	0.19		✓		2.05" (52)	3.35" (85)	1.57" (40)
RP210-16-4.7-QD	16	4.7	0.73	0.42	✓			2.05" (52)	3.45" (87.7)	1.61" (41)
RP210-16-4.7-S	16	4.7	0.73	0.42			✓	2.05" (52)	3.90" (99)	1.61" (41)
RP210-16-4.7-W	16	4.7	0.73	0.42		✓		2.05" (52)	3.35" (85)	1.57" (40)
RP210-16-10-QD	16	10	1.57	0.90	✓			2.05" (52)	3.45" (87.7)	1.61" (41)
RP210-16-10-S	16	10	1.57	0.90			✓	2.05" (52)	3.90" (99)	1.61" (41)
RP210-16-10-W	16	10	1.57	0.90		✓		2.05" (52)	3.35" (85)	1.57" (40)

\*Contact factory for dimensions.

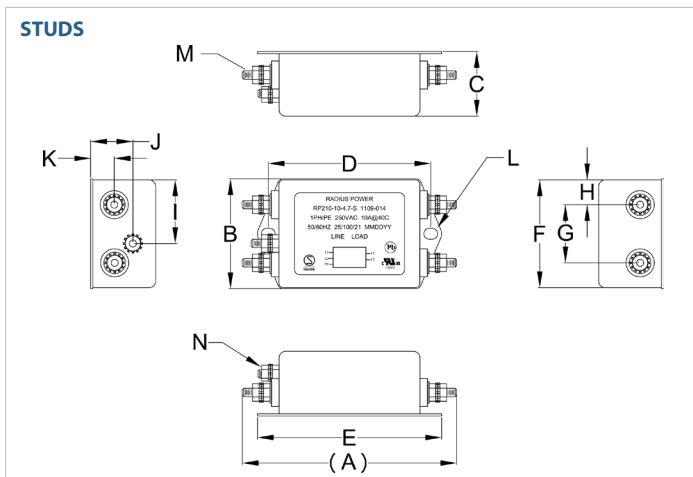
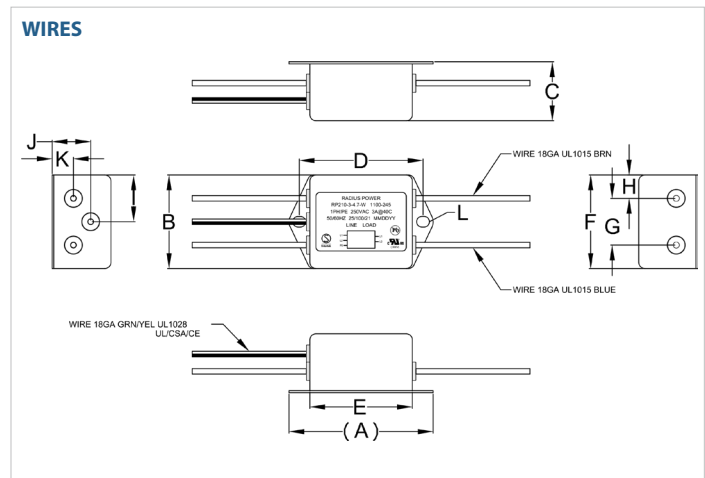
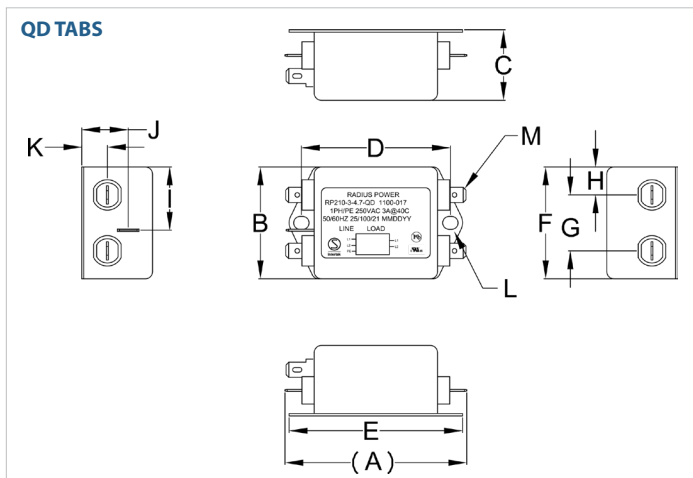
# RP210

## COMPACT DUAL STAGE POWER LINE FILTER

### TYPICAL INSERTION LOSS, dB (50/50 Ohm)

Amps	Freq (MHz)	0.15	0.5	1.0	10	30
3	CM (dB)	40	50	50	45	40
	DM (dB)	15	26	45	50	50
6	CM (dB)	30	42	50	55	35
	DM (dB)	30	42	50	55	35
10	CM (dB)	20	30	36	55	40
	DM (dB)	15	26	32	55	40
16	CM (dB)	18	25	40	55	45
	DM (dB)	15	25	40	65	50

### RP210 MECHANICAL OUTLINES (MM)



# RP210

## COMPACT DUAL STAGE POWER LINE FILTER

SERIES	(A)	B	C	D	E	F	G	H	I	J	K	L	M	N
<b>QD TABS (3/6A)</b>	2.93" (74.4)	1.85" (47)	1.18" (30)	2.40" (61)	2.80" (71)	1.85" (47)	0.91" (23)	0.45" (11.5)	1.02" (26)	0.75" (19)	0.41" (10.5)	Ø0.24"x5.3, 2x (Ø 6.3x5.3, 2x)	0.25", 5x (QD, MALE, 6.35, 5x)	N/A
<b>WIRES (3/6A)</b>	2.80" (71)	1.85" (47)	1.18" (30)	2.40" (61)	2.03" (51.5)	1.85" (47)	0.91" (23)	0.45" (11.5)	0.91" (23)	0.75" (19)	0.41" (10.5)	Ø0.24"x5.3, 2x (Ø 6.3x5.3, 2x)	N/A	N/A
<b>QD TABS (10A)</b>	3.47" (88.25)	2.05" (52)	1.22" (31)	2.95" (75)	3.35" (85)	2.01" (51)	1.06" (27)	0.45" (11.5)	1.16" (29.5)	0.77" (19.5)	0.43" (10.9)	Ø0.24"x5.1, 2x (Ø, 6.4x5.1, 2x)	0.25", 5x (QD, MALE, 6.35, 5x)	N/A
<b>WIRES (10A)</b>	3.35" (85)	2.01" (51)	1.22" (31)	2.95" (75)	2.60" (66)	2.05" (52)	1.06" (27)	0.45" (11.5)	0.98" (25)	0.77" (19.5)	0.43" (10.9)	N/A	N/A	N/A
<b>STUDS (10A)</b>	3.90" (99)	2.05" (52)	1.22" (31)	2.95" (75)	3.35" (85)	2.01" (51)	1.06" (27)	0.45" (11.5)	1.16" (29.5)	0.77" (19.5)	0.43" (10.9)	Ø0.24"x5.1, 2x (Ø, 6.4x5.1, 2x)	STUD, M4, 4x	STUD, GND, M4
<b>QD TABS (16A)</b>	3.45" (87.7)	2.05" (52)	1.61" (41)	2.95" (75)	3.35" (85)	2.01" (51)	1.06" (27)	0.45" (11.5)	1.52" (38.5)	1.14" (29)	0.49" (12.5)	Ø0.24"x5.1, 2x (Ø 6.4x5.1, 2x)	0.25", 5x (QD, MALE, 6.35, 5x)	N/A
<b>WIRES (16A)</b>	3.35" (85)	2.05" (52)	1.57" (40)	2.95" (75)	2.60" (66)	2.01" (51)	1.06" (27)	0.45" (11.5)	1.06" (27)	1.14" (29)	0.49" (12.5)	N/A	N/A	N/A
<b>STUDS (16A)</b>	3.90" (99)	2.05" (52)	1.61" (41)	2.95" (75)	3.35" (85)	1.97" (50)	1.06" (27)	0.45" (11.5)	1.52" (38.5)	1.14" (29)	0.49" (12.5)	Ø0.24"x5.1, 2x (Ø, 6.4x5.1, 2x)	STUD, M4, 4x	STUD GND M4

TYPICAL TOLERANCE: +/-0.02" (0.50MM)

# Mouser Electronics

Authorized Distributor

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