

RP120

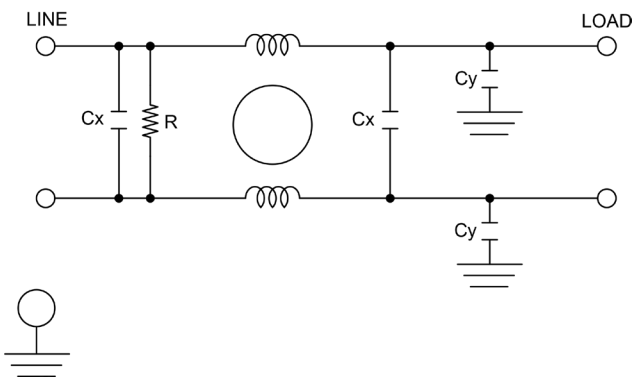
MEDIUM - HIGH PERFORMANCE SINGLE STAGE POWER LINE FILTER

FEATURES

- » Rated currents include **10A, 16A, 20A, 30A, 40A and 50A**
- » Single Stage Line Filter
- » Available with **QD** Tabs, **W** (wireleads), **S** (studs), and **C** (Connectors) option
- » Medium - High Performance
- » 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 S: 20A & 30A (M4) CONNECTORS

TYP. WEIGHT, LBS (KG) 0.4 (0.2)

TYPICAL LEAKAGE CURRENT

@ 250 VAC 50 Hz	0 - 15.75 mA Max.
@ 120 VAC 60 Hz	0 - 9.04 mA Max.

HIPOT RATINGS

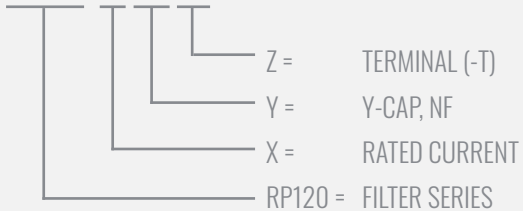
LINE TO GROUND	2700 VDC
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TYPICAL APPLICATIONS

- ✓ Household Appliances
- ✓ Industrial Equipment
- ✓ Medical Devices
- ✓ Communication systems
- ✓ Consumer Electronics
- ✓ Office Automation Devices
- ✓ Data Processing Systems

HOW TO ORDER

RP120-X-Y-Z



NOTE: USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS
E.G. **RP120-20-.47-QD** (20AMPS WITH .47 NF YCAP)

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

RP120

MEDIUM - HIGH PERFORMANCE SINGLE 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)		
					(QD) IN/ OUTPUT	(W) IN/ OUTPUT	(S) IN/ OUTPUT	(C) IN/ OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP120-10-0-QD	10	0	-	-	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-0-W	10	0	-	-		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-10-47-QD	10	0.47	0.07	0.04	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-47-W	10	0.47	0.07	0.04		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-10-1-QD	10	1	0.15	0.09	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-1-W	10	1	0.15	0.09		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-10-2.2-QD	10	2.2	0.34	0.19	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-2.2-W	10	2.2	0.34	0.19		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-10-4.7-QD	10	4.7	0.73	0.42	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-4.7-W	10	4.7	0.73	0.42		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-10-10-QD	10	10	1.57	0.90	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-10-W	10	10	1.57	0.90		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-10-22-QD	10	22	3.45	1.99	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-22-W	10	22	3.45	1.99		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-10-100-QD	10	100	15.70	9.04	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-10-100-W	10	100	15.70	9.04		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-0-QD	16	0	-	-	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-0-W	16	0	-	-		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-47-QD	16	0.47	0.07	0.04	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-47-W	16	0.47	0.07	0.04		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-1-QD	16	1	0.15	0.09	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-1-W	16	1	0.15	0.09		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-2.2-QD	16	2.2	0.34	0.19	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-2.2-W	16	2.2	0.34	0.19		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-4.7-QD	16	4.7	0.73	0.42	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-4.7-W	16	4.7	0.73	0.42		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-10-QD	16	10	1.57	0.90	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-10-W	16	10	1.57	0.90		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-22-QD	16	22	3.45	1.99	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-22-W	16	22	3.45	1.99		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-16-100-QD	16	100	15.70	9.04	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-16-100-W	16	100	15.70	9.04		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-20-0-QD	20	0	-	-	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-0-S	20	0	-	-			✓		*	*	*
RP120-20-0-W	20	0	-	-		✓			2.05" (52)	3.35" (85)	1.61" (41)

ADDITIONAL MODEL NO. >>

RP120

MEDIUM - HIGH PERFORMANCE SINGLE 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)		
					(QD) IN/ OUTPUT	(W) IN/ OUTPUT	(S) IN/ OUTPUT	(C) IN/ OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP120-20-47-QD	20	0.47	0.07	0.04	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-47-S	20	0.47	0.07	0.04			✓		*	*	*
RP120-20-47-W	20	0.47	0.07	0.04		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-20-1-QD	20	1	0.15	0.09	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-1-S	20	1	0.15	0.09			✓		*	*	*
RP120-20-1-W	20	1	0.15	0.09		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-20-2.2-QD	20	2.2	0.34	0.19	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-2.2-S	20	2.2	0.34	0.19			✓		*	*	*
RP120-20-2.2-W	20	2.2	0.34	0.19		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-20-4.7-QD	20	4.7	0.73	0.42	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-4.7-S	20	4.7	0.73	0.42			✓		*	*	*
RP120-20-4.7-W	20	4.7	0.73	0.42		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-20-10-QD	20	10	1.57	0.90	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-10-S	20	10	1.57	0.90			✓		*	*	*
RP120-20-10-W	20	10	1.57	0.90		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-20-22-QD	20	22	3.45	1.99	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-22-S	20	22	3.45	1.99			✓		*	*	*
RP120-20-22-W	20	22	3.45	1.99		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-20-100-QD	20	100	15.70	9.04	✓				2.05" (52)	3.54" (90)	1.61" (41)
RP120-20-100-S	20	100	15.70	9.04			✓		*	*	*
RP120-20-100-W	20	100	15.70	9.04		✓			2.05" (52)	3.35" (85)	1.61" (41)
RP120-30-0-C	30	0	-	-				✓	*	*	*
RP120-30-0-S	30	0	-	-			✓		4.13" (105)	5.30" (134.5)	1.54" (39)
RP120-30-0-W	30	0	-	-		✓			*	*	*
RP120-30-47-C	30	0.47	0.07	0.04				✓	*	*	*
RP120-30-47-S	30	0.47	0.07	0.04			✓		4.13" (105)	5.30" (134.5)	1.54" (39)
RP120-30-47-W	30	0.47	0.07	0.04		✓			*	*	*
RP120-30-1-C	30	1	0.15	0.09				✓	*	*	*
RP120-30-1-S	30	1	0.15	0.09			✓		4.13" (105)	5.30" (134.5)	1.54" (39)
RP120-30-1-W	30	1	0.15	0.09		✓			*	*	*
RP120-30-2.2-C	30	2.2	0.34	0.19				✓	*	*	*
RP120-30-2.2-S	30	2.2	0.34	0.19			✓		4.13" (105)	5.30" (134.5)	1.54" (39)
RP120-30-2.2-W	30	2.2	0.34	0.19		✓			*	*	*
RP120-30-4.7-C	30	4.7	0.73	0.42				✓	*	*	*
RP120-30-4.7-S	30	4.7	0.73	0.42			✓		4.13" (105)	5.30" (134.5)	1.54" (39)

ADDITIONAL MODEL NO. >>

RP120

MEDIUM - HIGH PERFORMANCE SINGLE 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)		
					(QD) IN/ OUTPUT	(W) IN/ OUTPUT	(S) IN/ OUTPUT	(C) IN/ OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP120-30-4.7-W	30	4.7	0.73	0.42		✓			*	*	*
RP120-30-10-C	30	10	1.57	0.90				✓	*	*	*
RP120-30-10-S	30	10	1.57	0.90			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-30-10-W	30	10	1.57	0.90		✓			*	*	*
RP120-30-22-C	30	22	3.45	1.99				✓	*	*	*
RP120-30-22-S	30	22	3.45	1.99			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-30-22-W	30	22	3.45	1.99		✓			*	*	*
RP120-30-100-C	30	100	15.70	9.04				✓	*	*	*
RP120-30-100-S	30	100	15.70	9.04			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-30-100-W	30	100	15.70	9.04		✓			*	*	*
RP120-40-0-C	40	0	-	-				✓	*	*	*
RP120-40-0-S	40	0	-	-			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-0-W	40	0	-	-		✓			*	*	*
RP120-40-47-C	40	0.47	0.07	0.04				✓	*	*	*
RP120-40-47-S	40	0.47	0.07	0.04			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-47-W	40	0.47	0.07	0.04		✓			*	*	*
RP120-40-1-C	40	1	0.15	0.09				✓	*	*	*
RP120-40-1-S	40	1	0.15	0.09			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-1-W	40	1	0.15	0.09		✓			*	*	*
RP120-40-2.2-C	40	2.2	0.34	0.19				✓	*	*	*
RP120-40-2.2-S	40	2.2	0.34	0.19			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-2.2-W	40	2.2	0.34	0.19		✓			*	*	*
RP120-40-4.7-C	40	4.7	0.73	0.42				✓	*	*	*
RP120-40-4.7-S	40	4.7	0.73	0.42			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-4.7-W	40	4.7	0.73	0.42		✓			*	*	*
RP120-40-10-C	40	10	1.57	0.90				✓	*	*	*
RP120-40-10-S	40	10	1.57	0.90			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-10-W	40	10	1.57	0.90		✓			*	*	*
RP120-40-22-C	40	22	3.45	1.99				✓	*	*	*
RP120-40-22-S	40	22	3.45	1.99			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-22-W	40	22	3.45	1.99		✓			*	*	*
RP120-40-100-C	40	100	15.70	9.04				✓	*	*	*
RP120-40-100-S	40	100	15.70	9.04			✓		4.13"(105)	5.30"(134.5)	1.54"(39)
RP120-40-100-W	40	100	15.70	9.04		✓			*	*	*

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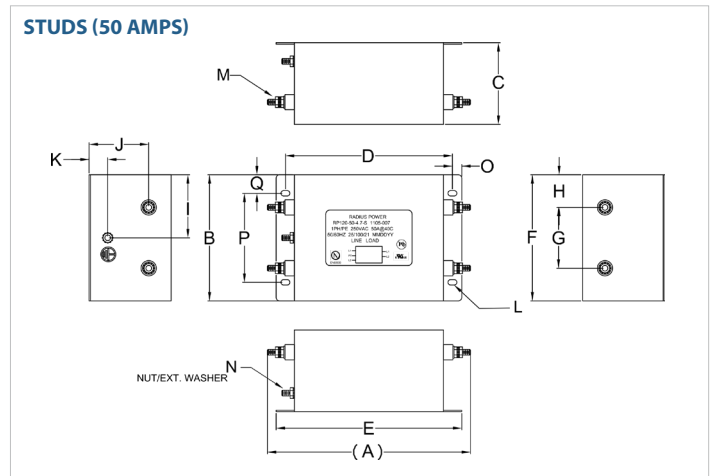
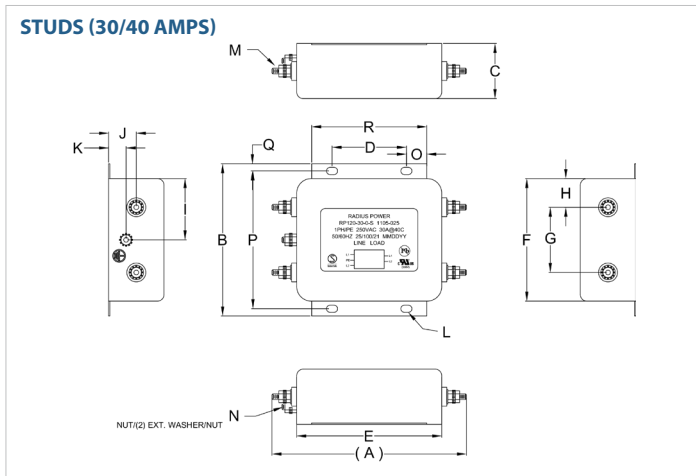
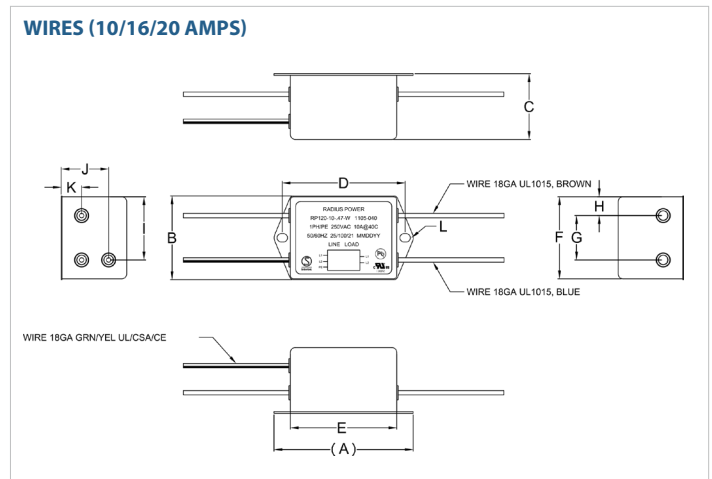
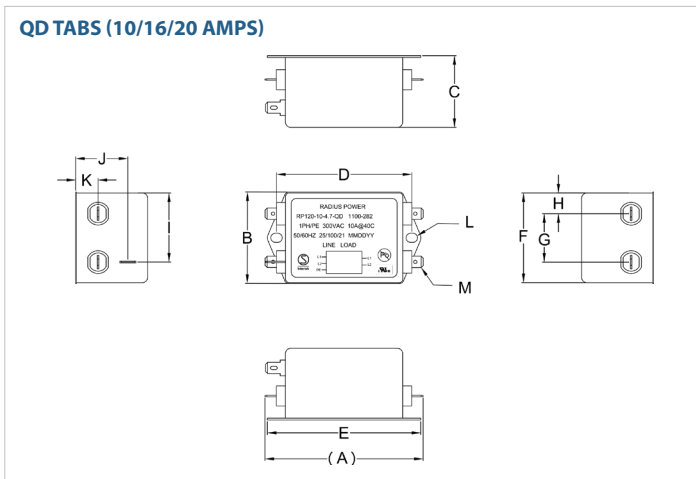
MODEL NO.	RATED CURRENT, A @ 40° C	Y-CAP, nF	LEAKAGE CURRENT, mA @ 250V AC, 50 Hz / @ 120V AC, 60 Hz		TERMINAL OPTIONS				MAX. DIMENSIONS" (MM)		
					(QD)IN/ OUTPUT	(W) IN/ OUTPUT	(S) IN/ OUTPUT	(C) IN/ OUTPUT	WIDTH	(LENGTH)	HEIGHT
RP120-50-0-C	50	0	-	-				✓	*	*	*
RP120-50-0-S	50	0	-	-			✓		4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-0-W	50	0	-	-	✓				*	*	*
RP120-50-47-C	50	0.47	0.07	0.04				✓	*	*	*
RP120-50-47-S	50	0.47	0.07	0.04			✓		4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-47-W	50	0.47	0.07	0.04	✓				*	*	*
RP120-50-1-C	50	1	0.15	0.09				✓	*	*	*
RP120-50-1-S	50	1	0.15	0.09			✓		4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-1-W	50	1	0.15	0.09	✓				*	*	*
RP120-50-2.2-C	50	2.2	0.34	0.19				✓	*	*	*
RP120-50-2.2-S	50	2.2	0.34	0.19					4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-2.2-W	50	2.2	0.34	0.19	✓				*	*	*
RP120-50-4.7-C	50	4.7	0.73	0.42				✓	*	*	*
RP120-50-4.7-S	50	4.7	0.73	0.42					4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-4.7-W	50	4.7	0.73	0.42	✓				*	*	*
RP120-50-10-C	50	10	1.57	0.90				✓	*	*	*
RP120-50-10-S	50	10	1.57	0.90					4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-10-W	50	10	1.57	0.90	✓				*	*	*
RP120-50-22-C	50	22	3.45	1.99				✓	*	*	*
RP120-50-22-S	50	22	3.45	1.99			✓		4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-22-W	50	22	3.45	1.99	✓				*	*	*
RP120-50-100-C	50	100	15.70	9.04				✓	*	*	*
RP120-50-100-S	50	100	15.70	9.04			✓		4.25"(108)	6.81"(173)	2.75"(69.9)
RP120-50-100-W	50	100	15.70	9.04	✓				*	*	*

*Contact factory for dimensions.

RP120

MEDIUM - HIGH PERFORMANCE SINGLE STAGE POWER LINE FILTER

RP120 MECHANICAL OUTLINES (MM)



SERIES	(A)	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	
QD TABS	3.54" (90)	2.05" (52)	1.61" (41)	2.95" (75)	3.35" (85)	2.01" (51)	1.06" (27)	0.45" (11.5)	1.56" (39.5)	1.14" (29)	0.49" (12.5)	Ø 0.25"x5.1, 2x (Ø 6.4x5.1, 2x)	0.25", 5x (QD, MALE, 6.35, 5x)	N/A	N/A	N/A	N/A	N/A
WIRES	3.35" (85)	2.05" (52)	1.61" (41)	2.95" (75)	3.60" (66)	2.01" (51)	1.06" (27)	0.45" (11.5)	1.56" (39.5)	1.14" (29)	0.49" (12.5)	Ø 0.25"x5.1, 2x (Ø 6.4x5.1, 2x)	N/A	N/A	N/A	N/A	N/A	N/A
STUDS (30/40A)	5.30" (134.5)	4.13" (105)	1.54" (39)	2.01" (51)	3.96" (100.5)	3.37" (85.5)	1.77" (45)	0.78" (19.8)	1.67" (42.3)	0.75" (19)	0.47" (12)	Ø 0.29"x5.0, 4x (Ø 7.6x5.0, 4x)	STUD M4, 4x	STUD GND M4	0.55" (14)	3.74" (95)	0.20" (5)	3.11" (79)
STUDS (50A)	6.81" (173)	4.25" (108)	2.75" (69.9)	5.59" (142)	6.22" (158.1)	4.25" (108)	2.05" (52)	1.10" (27.9)	2.13" (54)	2.00" (50.8)	0.63" (15.9)	Ø 0.29"x5.0, 4x (Ø 7.6x4.6, 4x)	STUD, M5, 4x	STUD, GND, M5	0.31" (8)	3.00" (76.2)	0.63" (15.9)	N/A

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

RP120

MEDIUM - HIGH PERFORMANCE SINGLE STAGE POWER LINE FILTER

TYPICAL INSERTION LOSS, dB (50/50 Ohm)

Amps	Freq (MHz)	0.15	0.5	1.0	10	30
10	CM (dB)	40	55	65	65	60
	DM (dB)	50	70	70	75	70
16	CM (dB)	34	50	60	60	55
	DM (dB)	44	70	70	68	64
20	CM (dB)	20	28	34	55	60
	DM (dB)	34	60	60	60	60
30	CM (dB)	15	34	40	55	55
	DM (dB)	30	65	65	60	60
40	CM (dB)	15	24	30	55	55
	DM (dB)	30	65	65	60	60
50	CM (dB)	24	32	50	60	60
	DM (dB)	40	65	65	60	60