

PC Board Mountable RFI Power Line Filters for Emission Control Applications

X, Y, Z Series



UL Recognized
CSA Certified
VDE Approved

X, Y, Z Series

X, Y, and Z series RFI filters are compact, PC board mountable components, designed to consume minimal board space. They provide a choice of three levels of performance, intended to be all the power line filter needed for the corresponding emission control application.

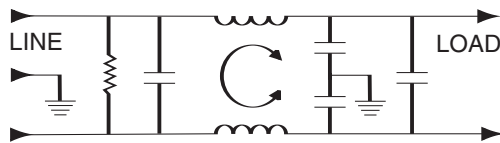
X Series – designed to bring most digital equipment (including switching power supplies) into compliance with FCC Part 15J, Class B conducted emission limits.

Y Series – designed to bring most digital equipment (including switching power supplies) into compliance with EN55022, Level A, and FCC Part 15J, Class B conducted emission limits.

Z Series – designed to bring most digital equipment (including switching power supplies) into compliance with EN55022, Level B (as well as FCC Part 15J, Class B) conducted emission limits.

This high compliance confidence level is attained by optimizing the differential mode performance of each series for the frequency range it needs to cover in the corresponding application. At the same time, excellent common mode performance is maintained across the frequency range of 10kHz to 30MHz, while still meeting the very low leakage current requirements of SEV and VDE portable equipment.

Electrical Schematic



Resistor location for reference only.



XP/YP/ZP



3EX1/3EZ1

Specifications

Maximum leakage current, each line-to-ground
 @ 120 VAC 60 Hz: .30 mA
 @ 250 VAC 50 Hz: .50 mA

Hipot rating (one minute):
 line-to-ground 2250 VDC
 line-to-line 1450 VDC

Operating frequency: 50/60 Hz

Rated voltage (max.): 250 VAC

Rated current:

1EZP	60°C	1A
2EYP/2EZP	60°C	2A
3EXP	60°C	3A
3EYP	55°C	3A
3EZP	50°C	3A
4EXP/4EYP	55°C	4A
6EXP	55°C	6A

Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency—MHz						
	.01	.05	.15	.5	1	5	10 30
EX							
3A	2	13	21	35	46	44	44 44
4A	2	13	22	38	44	44	44 38
6A	2	11	20	35	40	40	40 36
EY							
2A	8	21	31	49	44	40	40 40
3A	11	24	36	43	40	40	40 40
4A	5	18	28	45	40	40	40 36
EZ							
1A	18	32	43	47	44	43	43 45
2A	18	32	45	41	40	40	40 40
3A	15	29	39	43	42	40	40 40

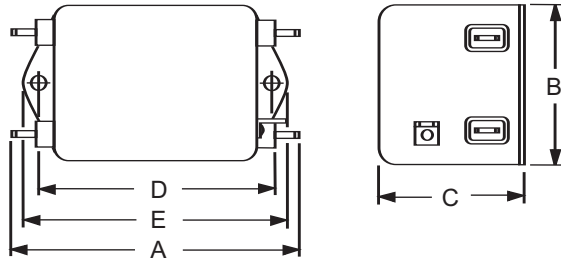
Line-to-line in 50 ohm circuit

Current Rating	Frequency—MHz								
	.02	.03	.05	.07	.15	.5	1	5	10 30
EX									
3A	-	-	-	5	34	60	65	60	45 50
4A	-	-	-	10	37	70	70	70	65 55
6A	-	-	-	3	31	65	70	70	60 55
EY									
2A	-	-	10	19	40	70	75	70	60 55
3A	-	-	10	20	42	68	68	67	62 50
4A	-	-	6	18	41	67	75	70	65 55
EZ									
1A	7	29	34	43	62	70	70	70	60 55
2A	2	15	31	40	57	75	70	65	55 50
3A	-	10	26	34	53	75	75	70	60 55

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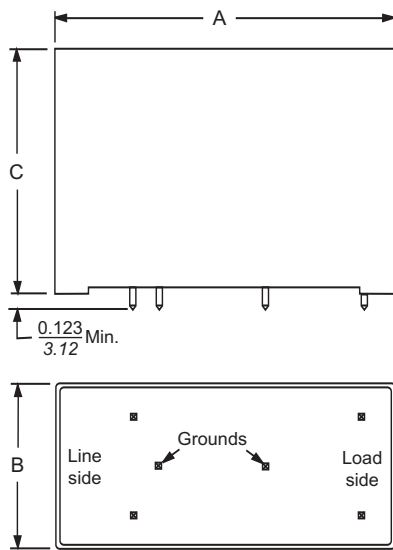
Case Styles

EX1/EZ1

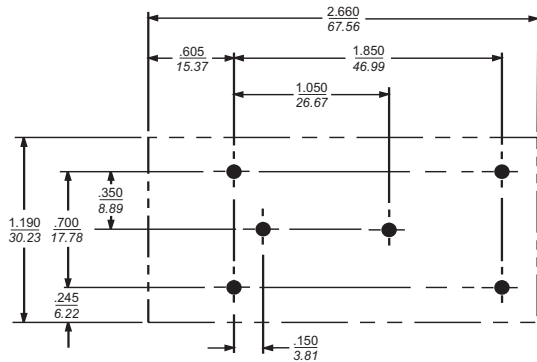


Typical dimensions:
 Terminals: .250 [6.35] (5) Holes: .07 [1.8] Dia. (4)
 Slot: .07 x .16 [1.8 x 4.1] Mounting holes: .188 [4.78] Dia. (2)

EXP/EYP/EZP



Recommended Mounting Holes & Clearance Area



Tolerance $\pm .006$ [.152] Holes: .075 [1.91] Dia. (6)

Case Dimensions

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3EXP	2.61 <i>66.3</i>	1.13 <i>28.7</i>	1.62 <i>41.1</i>	—	—
3EX1	3.01 <i>76.7</i>	1.84 <i>46.8</i>	1.16 <i>29.46</i>	2.375 <i>60.33</i>	2.79 <i>70.87</i>
4EXP	2.61 <i>66.3</i>	1.13 <i>28.7</i>	1.62 <i>41.1</i>	—	—
6EXP	2.61 <i>66.3</i>	1.13 <i>28.7</i>	1.75 <i>44.5</i>	—	—
2EYP	2.61 <i>66.3</i>	1.13 <i>28.7</i>	1.62 <i>41.1</i>	—	—
3EYP, 4EYP	2.61 <i>66.3</i>	1.13 <i>28.7</i>	1.75 <i>44.5</i>	—	—
1EZP	2.61 <i>66.3</i>	1.13 <i>28.7</i>	1.62 <i>41.1</i>	—	—
2EZP, 3EZP	2.61 <i>66.3</i>	1.13 <i>28.7</i>	1.75 <i>44.5</i>	—	—
3EZ1	3.54 <i>89.9</i>	2.08 <i>52.8</i>	1.31 <i>33.3</i>	2.938 <i>74.63</i>	3.35 <i>85.1</i>

Part Numbers

3EXP	1EZP
3EX1	2EZP
4EXP	3EZP
6EXP	3EZ1
2EYP	
3EYP	
4EYP	