# X, Y, Z Series

PC Board Mountable RFI Power Line Filters for Emission Control Applications



UL Recognized CSA Certified VDE Approved

# X, Y, and 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**

X Y Z 80



Resistor location for reference only.





3EX1/3EZ1

XP/ YP/ZP

## **Specifications**

Maximum leakage line-to-ground	e current, each @ 120 VAC 60 Hz: @ 250 VAC 50 Hz:	.30 mA .50 mA
Hipot rating (one line-to-gro line-to-line	und	2250 VDC 1450 VDC
Operating freque	ncy:	50/60 Hz
Rated voltage:		120/250 VAC
Rated current: (60°C ambier	@120 VAC	@ 250 VAC
1EZP	1A	.75A
2EYP/2EZP	2A	1.5A
3EXP/3EYP/3	EZP 3A	2A
4EXP/4EYP	4A	3A
6EXP	6A	4A

#### Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Line-to-ground in 50 onin circuit									
Frequenc	;y	EX			EY			ΕZ	
MHz	3A	4A	6A	2A	3A	4A	1A	2A	3A
.01	2	2	2	8	11	5	18	18	15
.05	13	13	11	21	24	18	32	32	29
.15	21	22	20	31	36	28	43	45	39
.5	35	37	35	49	43	45	47	41	43
1	46	44	40	44	40	40	44	40	42
5	44	44	40	40	40	40	43	40	40
10	44	44	40	40	40	40	43	40	40
30	44	38	36	40	40	36	45	40	40

#### Line-to-line in 50 ohm circuit

Frequenc	:y	EΧ			EΥ			ΕZ	
MHz	3A	4A	6A	2A	3A	4A	1A	2A	3A
.02	-	-	-	-	-	-	7	2	-
.03	-	-	-	-	-	-	19	15	10
.05	-	-	-	10	10	6	34	31	26
.07	5	10	3	19	20	18	43	40	34
.15	34	37	31	40	42	41	62	57	53
.5	60	70	65	70	68	67	70	75	75
1	65	70	70	75	68	75	70	70	75
5	60	70	70	70	67	70	70	65	70
10	45	65	60	60	62	65	60	55	60
30	50	55	55	55	50	55	55	50	55





.<u>150</u> 3.81

Part No.	A (max)	B (max)	C (max)	D <u>± .015</u> ± .38	E (max)
3EXP	2.61	1.13 28.7	1.62		
3EX1	3.01 76.7	<u> </u>	1.16 29.46	2.375 <i>60.33</i>	2.79 70.87
4EXP	2.61	<u> </u>	1.62		
6EXP	2.61 66.3	1.13 28.7	1.75 <i>44.5</i>		
2EYP	2.61	1.13 28.7	1.62		
3EYP	2.61	<u> </u>	<u>1.75</u> 44.5		
4EYP	<u>2.61</u> 66.3	<u> </u>	<u> </u>		
1EZP	2.61	1.13 28.7	1.62		
2EZP	2.61 66.3	1.13 28.7	1.75 <i>44.5</i>		
3EZP	2.61 66.3	<u> </u>	<u> </u>		
3EZ1	3.54	2.08	<u> </u>	2.938 74.63	3.35 <i>85.1</i>

### Pricing

Consult your local Corcom sales representative for pricing.

Part No.	Part No.
3EXP	1EZP
3EX1	2EZP
4EXP	3EZP
6EXP	3EZ1
2EYP	
3EYP	
4EYP	

X Y Z 81



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<u>1.190</u> <u>.700</u> 30.23 <u>17.78</u>

> .245 6.22

Tolerance  $\frac{\pm .006}{.152}$