

## **Electronics**

## 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.

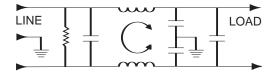
**X Series** – designed to bring most digital equipment (including switching power supplies) into compliance with FCC Part 15J, Class B conducted emission limits.

**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.





## **Specifications**

Maximum leakage current, each line-to-ground	
@ 120 V/AC 60 Hz.	

@ 120 VAC 60 HZ:		.30 IIIA
@ 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

0								
Current		Frequency-MHz						
Rating	.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 circ	Ī	ine-to	-line i	n 50	ohm	circu	t
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Current	Frequency-MHz									
Rating	.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

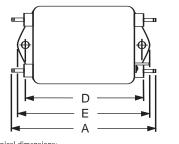


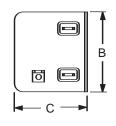


## PC Board Mountable RFI Power Line Filters for Emission Control Applications (Continued)

# X, Y, Z Series

# Case Styles EX1/EZ1

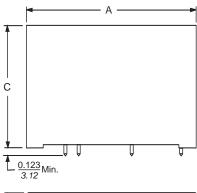


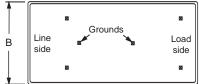


Typical dimensions: Terminals: .250 [*6.35*] (5) Slot: .07 x .16 [*1.8* x 4.1]

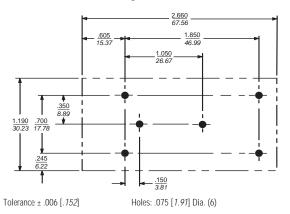
Holes: .07 [1.8] Dia.(4) Mounting holes: .188 [4.78] Dia. (2)

#### EXP/EYP/EZP





## **Recommended Mounting Holes & Clearance Area**



## **Case Dimensions**

	Α	В	С	D	Е	
Part No.	(max)	(max)	(max)	± .015 ± .38	(max)	
3EXP	2.61	1.13	1.62	_	_	
02/11	66.3	28.7	41.1			
3EX1	3.01	1.84	1.16	2.375	2.79	
OLXI	76.7	46.8	29.46	60.33	70.87	
4EXP	2.61	1.13	1.62	_	_	
ILXI	66.3	28.7	41.1			
6EXP	2.61	1.13	1.75	_	_	
OLXI	66.3	28.7	44.5			
2EYP	2.61	1.13	1.62	_	_	
2211	66.3	28.7	41.1			
3EYP, 4EYP	2.61	1.13	1.75			
OL 11 , 4L 11	66.3	28.7	44.5			
1EZP	2.61	1.13	1.62			
1221	66.3	28.7	41.1			
2EZP, 3EZP	2.61	1.13	1.75			
ZLZI , OLZI	66.3	28.7	44.5			
3EZ1	3.54	2.08	1.31	2.938	3.35	
0221	89.9	52.8	33.3	74.63	85.1	

## **Part Numbers**

1EZP 2EZP 3EZP 3EZ1