

## **Electronics**

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

# X, Y, Z Series



UL Recognized CSA Certified VDE Approved



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.

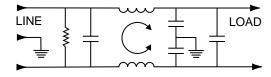
**X Series** – designed to bring most digital equipment (including switching power supplies) into compliance with FCC Part 15J, Class B conducted emission limits.

**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
~ 10	~ \ / A ~ /	O I I	

@ 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

9								
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 circuit

Germany:

Current Frequency-MHz					Z					
Rating	.02	.03	.05	.07	.15	.5	1	5	10	30
EX										
3 <b>A</b>	-	-	-	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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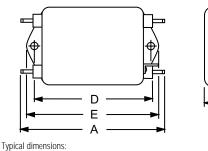


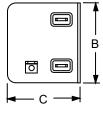
# **Electronics**

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

# X, Y, Z Series

# Case Styles EX1/EZ1

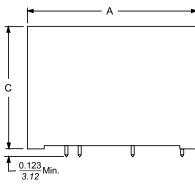


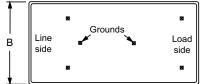


ypical dimensions: Terminals: .250 [*6.35*] (5) Slot: .07 x .16 [*1.8 x 4.1*]

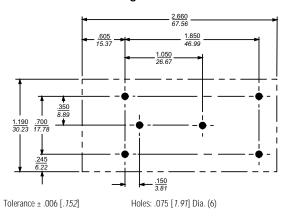
Holes: .07 [1.8] Dia.(4) Mounting holes: .188 [4.78] Dia. (2)

#### EXP/EYP/EZP





# **Recommended Mounting Holes & Clearance Area**



#### **Case Dimensions**

	Α	В	С	D	Ε	
Part No.	(max)	(max)	(max)	± .015 ± .38	(max)	
3EXP	2.61	1.13	1.62	_	_	
OE/(I	66.3	28.7	41.1			
3EX1	3.01	1.84	1.16	2.375	2.79	
	76.7	46.8	29.46	60.33	70.87	
4EXP	2.61	1.13	1.62	_	_	
	66.3	28.7	41.1			
6EXP	2.61	1.13	1.75	_	_	
	66.3	28.7	44.5			
2EYP	2.61	1.13	1.62	_	_	
	66.3	28.7	41.1			
3EYP	2.61	1.13	1.75	_	_	
	66.3	28.7	44.5			
4EYP	2.61	1.13	1.75	_	_	
	66.3	28.7	44.5			
1EZP	2.61	1.13	1.62	_	_	
	66.3	28.7	41.1			
2EZP	2.61	1.13	1.75	_	_	
	66.3	28.7	44.5			
3EZP	2.61	1.13	1.75	_	_	
	66.3	28.7	44.5			
3EZ1	3.54	2.08	1.31	2.938	3.35	
~ <b></b> .	89.9	52.8	33.3	74.63	85.1	

## **Part Numbers**

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