

Chassis or PC Board Mountable Power Line Filters for Emission Control

X, Y, Z Series



UL Recognized
CSA Certified
VDE Approved



XP / YP / ZP



3EX1 / 3EZ1

X, Y, Z Series

- Compact chassis or PC board mountable
- Three levels of performance
- Complete filtering solution in minimal size

X Series

- Designed to bring most digital equipment (including those with switching power supplies) into compliance with FCC Part 15J, Class B conducted emission limits

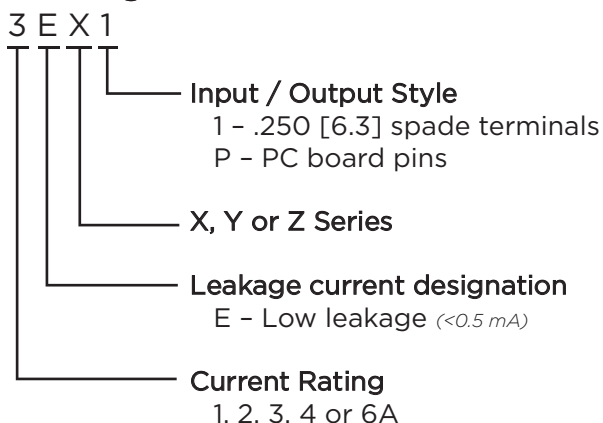
Y Series

- Designed to bring most digital equipment (including those with 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 those with switching power supplies) into compliance with EN55022, Level B and FCC Part 15J, Class B conducted emission limits

Ordering Information



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

Rated Voltage (max):

250 VAC

Operating Frequency:

50/60 Hz

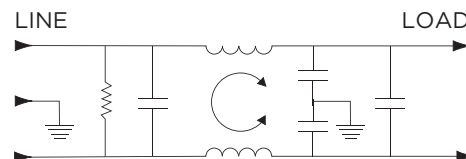
Rated Current:

1 to 6A

Operating Ambient Temperature Range

(at rated current I_r): -10°C to $+40^{\circ}\text{C}$
In an ambient temperature (T_a) higher than $+40^{\circ}\text{C}$
the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85 - T_a)/45}$

Electrical Schematic



Available Part Numbers

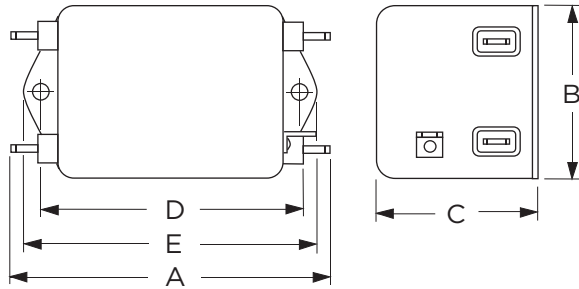
3EXP	4EYP
3EX1	1EZP
4EXP	2EZP
6EXP	3EZP
2EYP	3EZ1
3EYP	

Chassis & PC Board Mountable RFI Filters for Emission Control *(continued)*

X, Y, Z Series

Case Styles

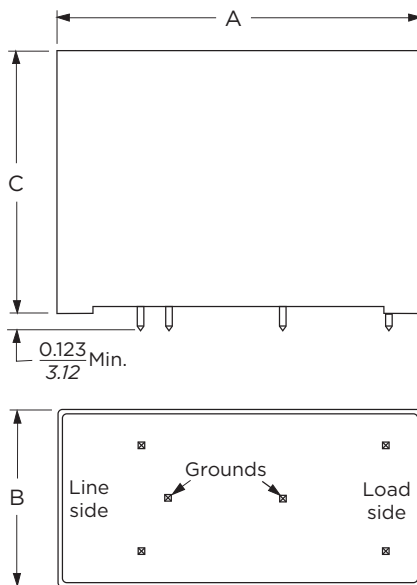
X1 & Z1



Typical Dimensions:

Line/Load Terminals (4): .250 [6.3] with .07 [1.8] Dia. hole
Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot
Mounting Holes (2): .188 [4.78] Dia.

XP, YP & ZP



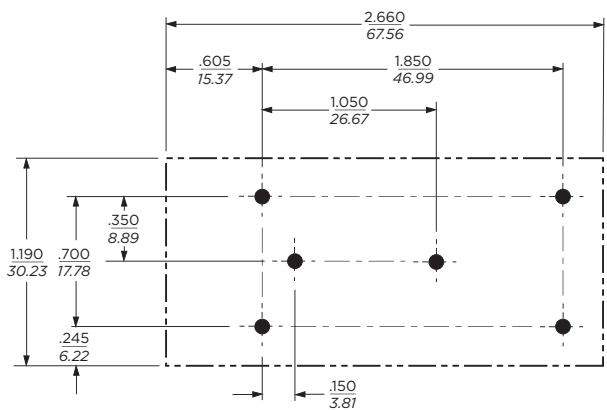
Typical Dimensions:

Pins (5): 0.065 [1.65] max. diagonal

Case Dimensions

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3EXP	2.61 66.3	1.13 28.7	1.62 41.1	—	—
3EX1	3.01 76.7	1.84 46.8	1.16 29.46	2.375 60.33	2.79 70.87
4EXP	2.61 66.6	1.13 28.7	1.62 41.1	—	—
6EXP	2.61 66.3	1.13 28.7	1.75 44.5	—	—
2EYP	2.61 66.3	1.13 28.7	1.62 41.1	—	—
3EYP, 4EYP	2.61 66.3	1.13 28.7	1.75 44.5	—	—
1EZP	2.61 66.3	1.13 28.7	1.62 41.1	—	—
2EZP, 3EZP	2.61 66.3	1.13 28.7	1.75 44.5	—	—
3EZ1	3.54 89.9	2.08 52.8	1.31 33.3	2.938 74.63	3.35 85.1

Recommended PC Board Layout



Tolerance $\pm .006$ [.152]

Holes(6): .075 [1.91] Dia.

Chassis & PC Board Mountable RFI Filters for Emission Control *(continued)*

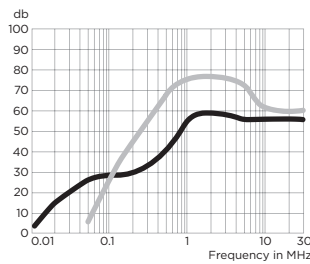
X, Y, Z Series

Performance Data

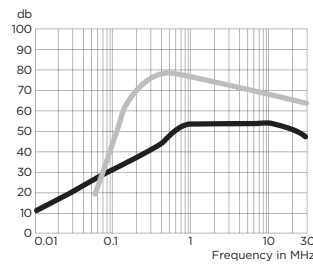
Typical Insertion Loss

Measured in closed 50 Ohm system

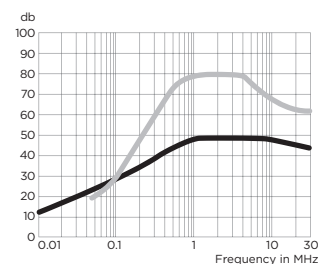
3EX



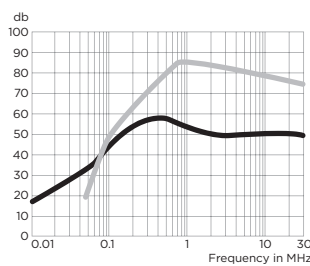
4EX



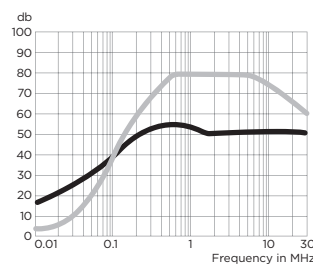
6EX



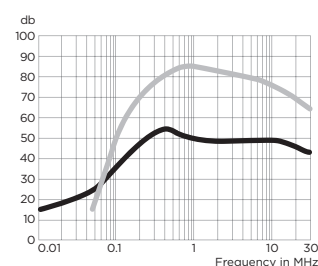
2EY



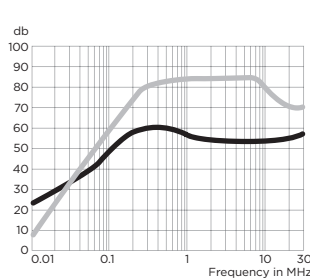
3EY



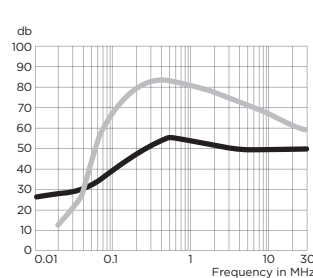
4EY



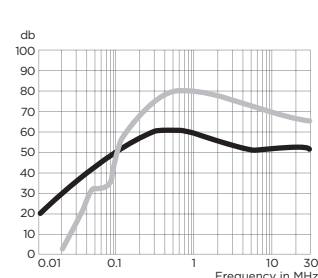
1EZ



2EZ



3EZ



— Common Mode / Asymmetrical (L-G)
— Differential Mode / Symmetrical (L-L)

Chassis & PC Board Mountable RFI Filters for Emission Control *(continued)*

Performance Data *(Continued)*

Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Part No.	Frequency – MHz							
	.01	.05	.15	.5	1	5	10	30
X Series								
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
Y Series								
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
Z Series								
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

Differential Mode / Symmetrical (Line to Line)

Part No.	Frequency – MHz									
	.02	.03	.05	.07	.15	.5	1	5	10	30
X Series										
3A	-	-	-	5	34	60	65	60	45	50
4A	-	-	-	10	37	70	70	70	65	55
6A	-	-	-	3	31	65	70	70	65	55
Y Series										
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
Z Series										
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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RFI Power Line Filters