

**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

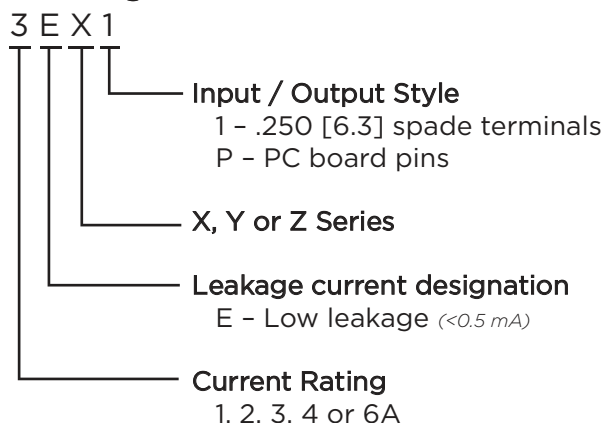
## Y Series

- 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:

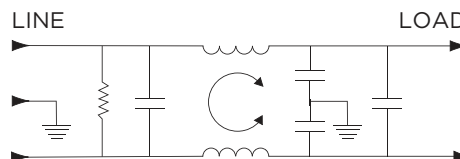
1 to 6A

### Operating Ambient Temperature Range

(at rated current  $I_r$ ): -10°C to +40°C

In an ambient temperature ( $T_a$ ) higher than +40°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

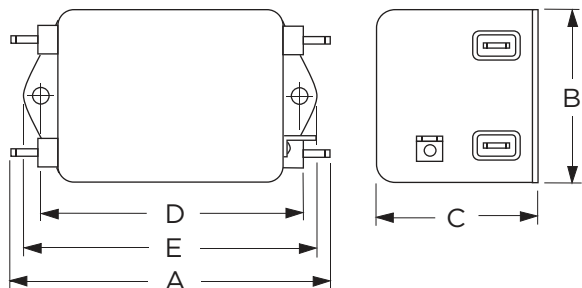
3EXP	4EYP
3EX1	1EZP
4EXP	2EZP
6EXP	3EZP
2EYP	3EZ1
3EYP	

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

# X, Y, Z Series

## Case Styles

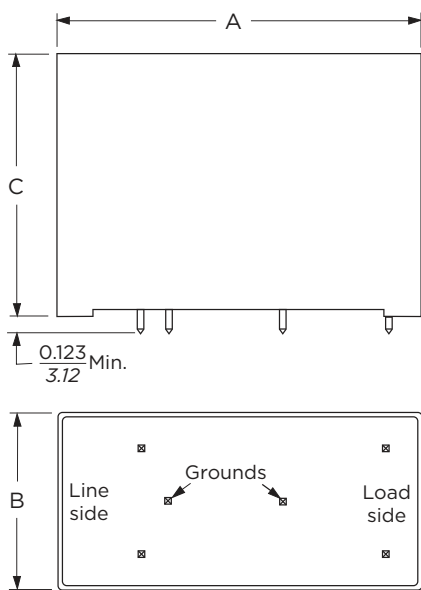
### X1 & Z1



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



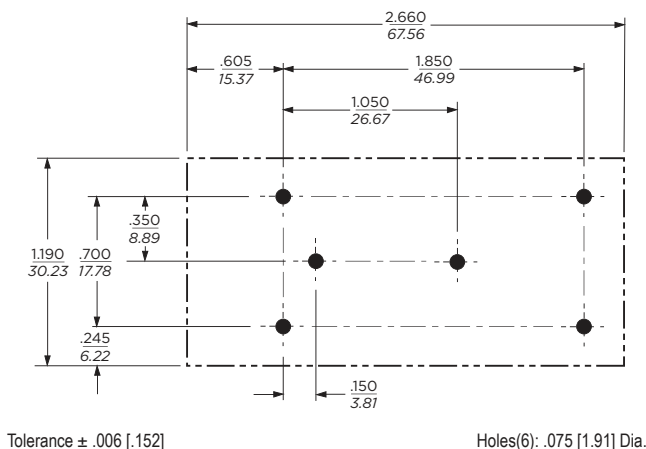
Typical Dimensions:

- 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	<b>2.61</b> 66.3	<b>1.13</b> 28.7	<b>1.62</b> 41.1	—	—
3EX1	<b>3.01</b> 76.7	<b>1.84</b> 46.8	<b>1.16</b> 29.46	<b>2.375</b> 60.33	<b>2.79</b> 70.87
4EXP	<b>2.61</b> 66.6	<b>1.13</b> 28.7	<b>1.62</b> 41.1	—	—
6EXP	<b>2.61</b> 66.3	<b>1.13</b> 28.7	<b>1.75</b> 44.5	—	—
2EYP	<b>2.61</b> 66.3	<b>1.13</b> 28.7	<b>1.62</b> 41.1	—	—
3EYP, 4EYP	<b>2.61</b> 66.3	<b>1.13</b> 28.7	<b>1.75</b> 44.5	—	—
1EZP	<b>2.61</b> 66.3	<b>1.13</b> 28.7	<b>1.62</b> 41.1	—	—
2EZP, 3EZP	<b>2.61</b> 66.3	<b>1.13</b> 28.7	<b>1.75</b> 44.5	—	—
3EZ1	<b>3.54</b> 89.9	<b>2.08</b> 52.8	<b>1.31</b> 33.3	<b>2.938</b> 74.63	<b>3.35</b> 85.1

## Recommended PC Board Layout



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

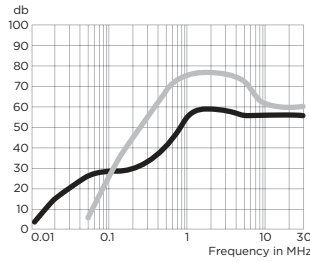
# X, Y, Z Series

## Performance Data

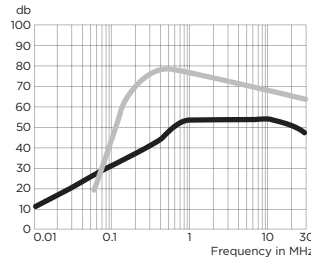
### Typical Insertion Loss

Measured in closed 50 Ohm system

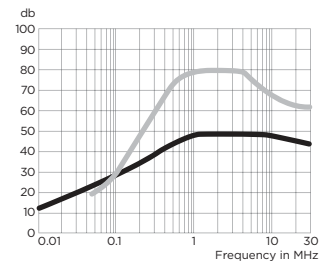
**3EX**



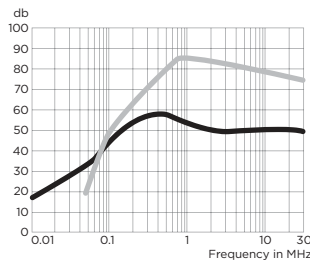
**4EX**



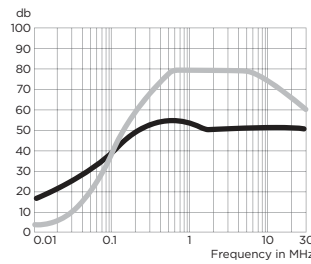
**6EX**



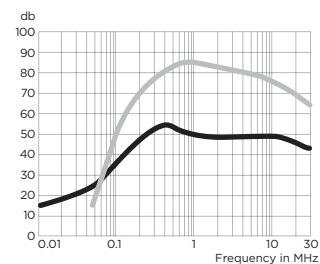
**2EY**



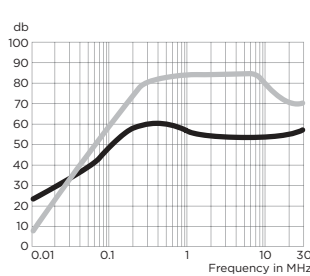
**3EY**



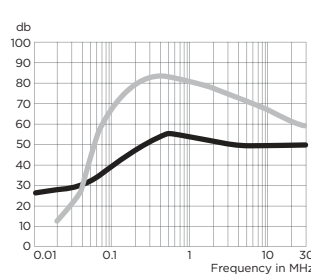
**4EY**



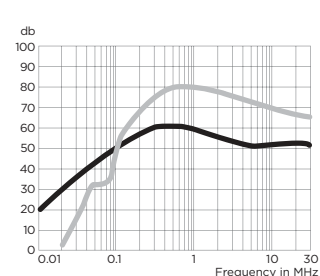
**1EZ**



**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
<b>X Series</b>								
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
<b>Y Series</b>								
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
<b>Z Series</b>								
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
<b>X Series</b>										
3A	-	-	-	5	34	60	65	60	45	50
4A	-	-	-	10	37	70	70	70	65	55
6A	-	-	-	3	31	65	70	70	65	55
<b>Y Series</b>										
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
<b>Z Series</b>										
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

