

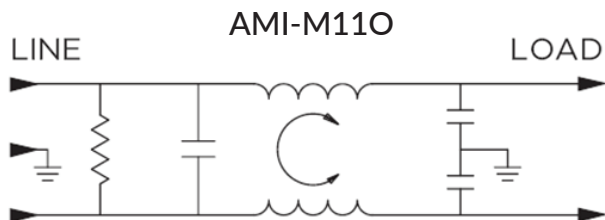
# High Performance RFI Line Filters

## AMI-M110 Series

### Metal Enclosure Single Phase Single Stage

AMI Designation	Input/output Style		Current Rating	Inductance	Capacitance		Resistor	Leakage Current @ 120 VAC 60Hz/250 VAC 50Hz	TIL Insertion Loss	Case Style
				mH	Cx	Cy	KΩ			
Available Part Numbers	6.3mm Spade Terminals	Threaded Bolts			nF	pF		mA		
AMI-M110-1-6-B	1	-	6	1.0	1000	2800	330	0.22/0.36	001	A
AMI-M110P-1-10-B	1	-	10	1.1	1000	2800	330	0.22/0.36	002	B
AMI-M110-6-10-B	-	6	10	1.1	1000	2800	330	0.22/0.36	003	C
AMI-M110-1-20-B	1	-	20	0.9	1000	2800	330	0.22/0.36	004	B
AMI-M110-6-20-B	-	6	20	0.9	1000	2800	330	0.22/0.36	005	C
AMI-M110-6-30-B	-	6	30	0.9	1000	2800	330	0.22/0.36	006	C
AMI-M110-1-6-C	1	-	6	1.0	1000	10000	330	0.75/1.25	007	A
AMI-M110-1-10-C	1	-	10	1.1	1000	10000	330	0.75/1.25	008	B
AMI-M110-6-10-C	-	6	10	1.1	1000	10000	330	0.75/1.25	009	C
AMI-M110-1-20-C	1	-	20	0.9	1000	10000	330	0.75/1.25	010	B
AMI-M110-6-20-C	-	6	20	0.9	1000	10000	330	0.75/1.25	011	C
AMI-M110-6-30-C	-	6	30	0.9	1000	10000	330	0.75/1.25	012	C

## Electrical Schematic



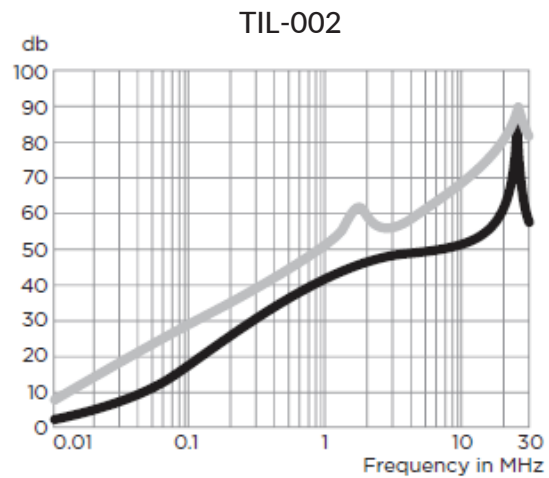
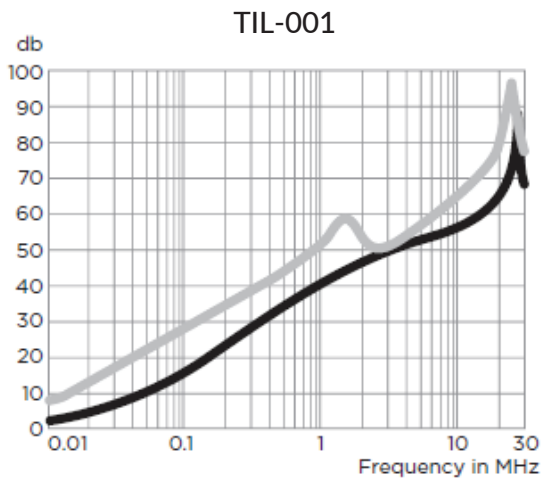
# High Performance RFI Line Filters

## Specifications:

- Rated Voltage (max): 250 VAC
- Operating Frequency: 50/60 Hz
- Operating Current: 6 to 30 A
- Hi-pot Rating (one minute): Line to Ground: 2250 VDC  
Line to Line: 1450 VDC
- Operating Ambient Temperature Range (at rated current  $I_r$ ):  $-10^{\circ}\text{C}$  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:  $I_o = I_r \sqrt{[(85 - T_a)/45]}$

## Performance Data Typical Insertion Loss

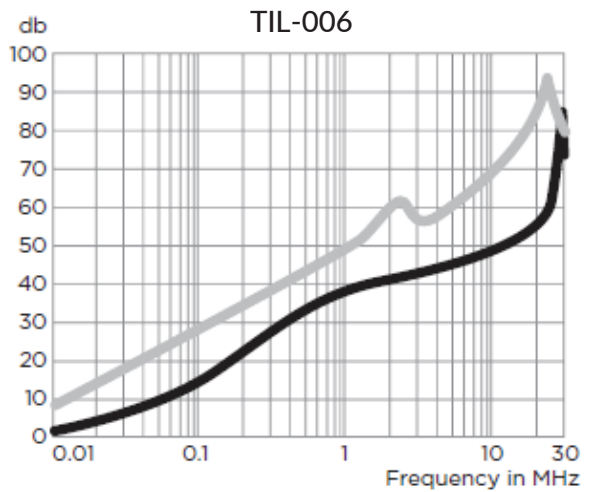
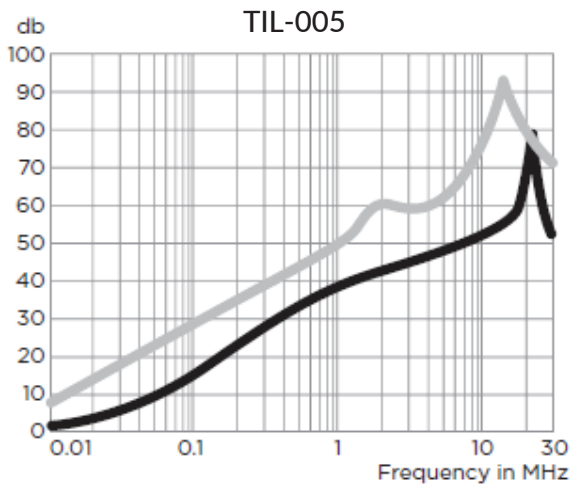
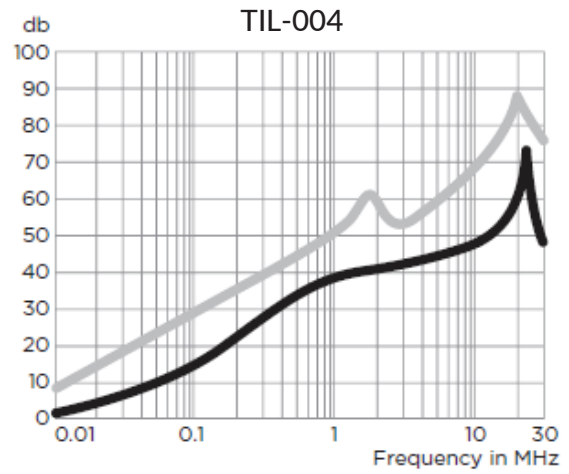
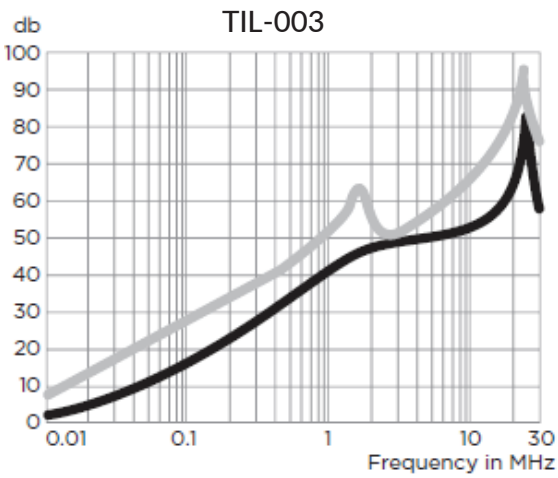
Measured in closed 50 Ohm system



# High Performance RFI Line Filters

## Performance Data Typical Insertion Loss

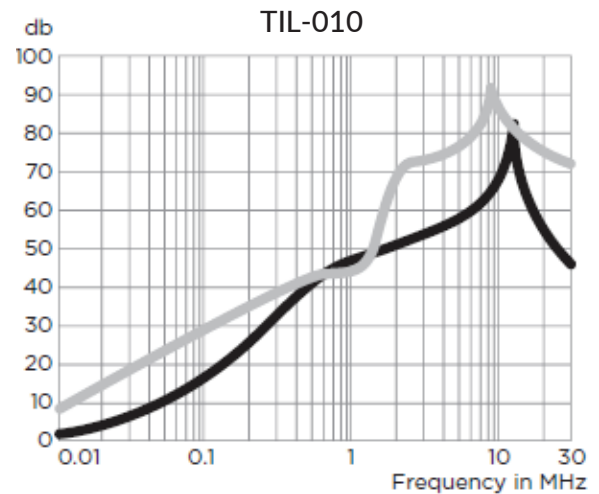
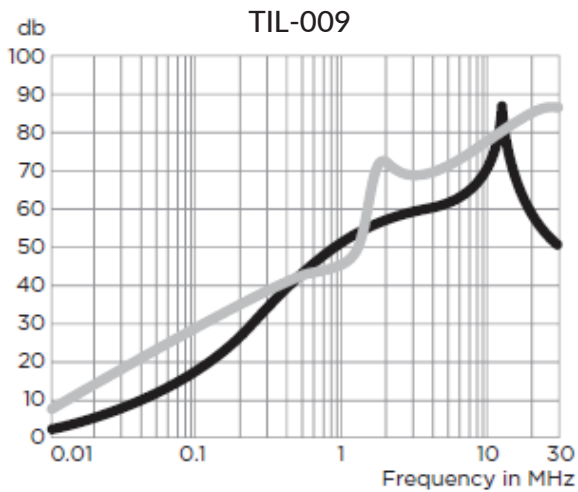
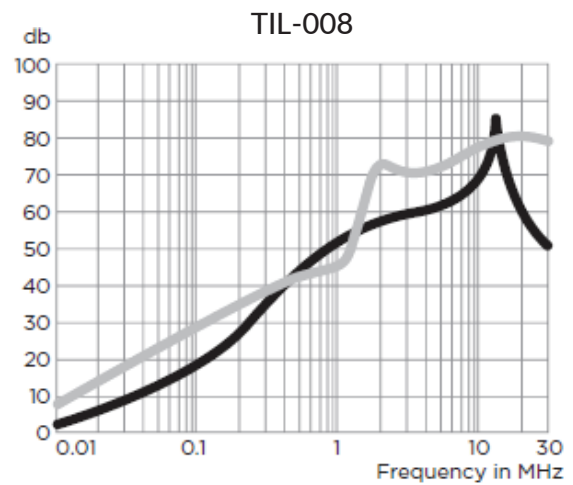
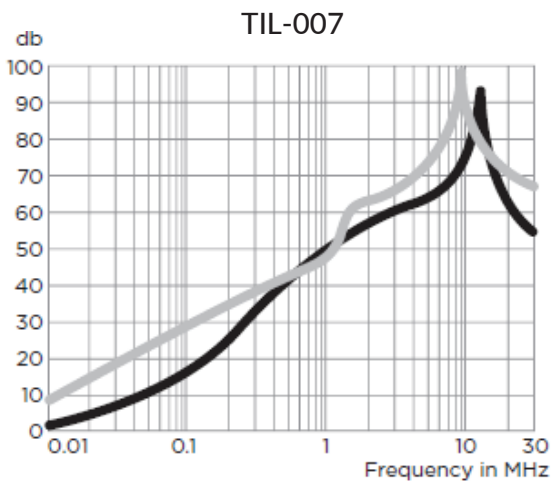
Measured in closed 50 Ohm system



# High Performance RFI Line Filters

## Performance Data Typical Insertion Loss

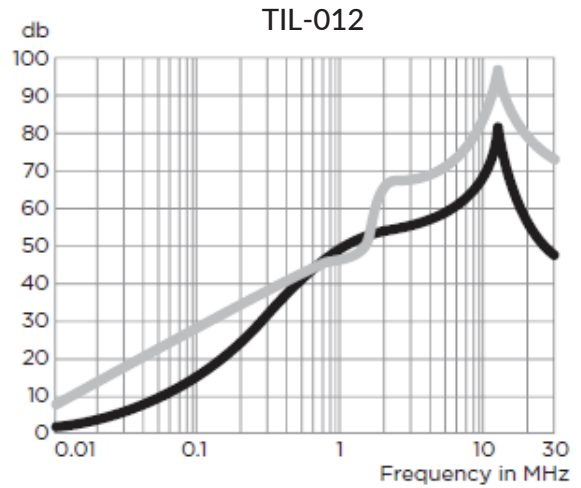
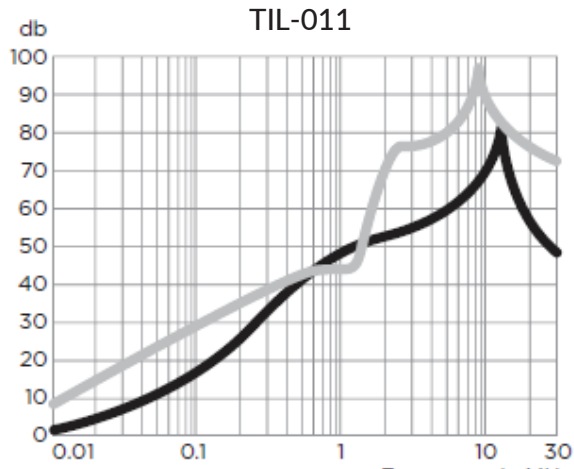
Measured in closed 50 Ohm system



# High Performance RFI Line Filters

## Performance Data Typical Insertion Loss

Measured in closed 50 Ohm system



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

# High Performance RFI Line Filters

## Minimum Insertion Loss

Common Mode/Asymmetrical (Line to Ground)

Model Number	Frequency-MHz										
	.01	.05	.1	.15	.5	1	2	5	10	20	30
AMI-M110-1-6-B	3	8	13	17	31	37	40	47	50	58	62
AMI-M110-1-10-B	3	9	15	19	31	39	41	44	47	54	51
AMI-M110-6-10-B	3	9	14	18	31	39	41	44	47	54	54
AMI-M110-1-20-B	3	7	13	15	30	35	37	39	40	46	40
AMI-M110-6-20-B	3	7	13	16	30	35	39	40	44	58	46
AMI-M110-6-30-B	3	7	13	17	30	34	37	40	42	49	58
AMI-M110-1-6-C/D	3	8	14	19	37	47	51	58	66	59	49
AMI-M110-1-10-C/D	3	9	15	21	41	49	50	56	64	54	46
AMI-M110-6-10-C/D	3	9	15	21	39	49	50	56	64	54	44
AMI-M110-1-20-C/D	3	7	14	19	37	45	47	50	60	48	40
AMI-M110-6-20-C/D	3	7	14	19	37	44	49	52	62	48	41
AMI-M-110-6-30-C/D	3	6	13	18	37	45	49	51	60	50	42

# High Performance RFI Line Filters

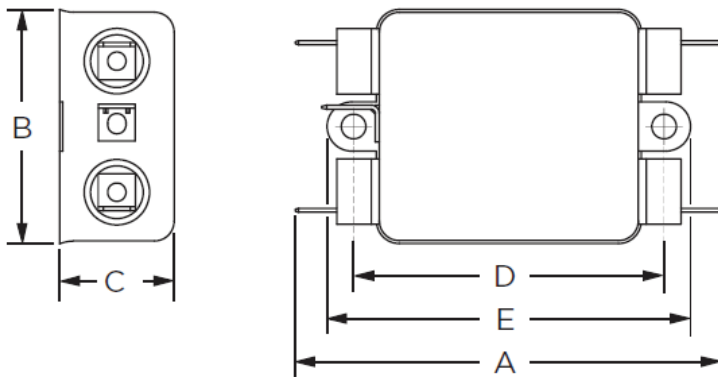
## Minimum Insertion Loss

Differential Mode/Symmetrical (Line to Line)

Model Number	Frequency-MHz											
	.01	.03	.05	.1	.15	.5	1	2	5	10	20	30
AMI-M110-1-6-B	5	14	20	25	29	41	49	47	50	60	74	72
AMI-M110-1-10-B	5	15	20	26	29	41	47	50	54	64	74	74
AMI-M110-6-10-B	5	14	20	25	29	41	47	48	50	60	62	64
AMI-M110-1-20-B	5	15	21	26	29	41	45	48	54	63	70	66
AMI-M110-6-20-B	5	15	21	26	29	41	44	48	54	63	70	66
AMI-M110-6-30-B	5	15	20	25	29	40	46	50	50	58	70	70
AMI-M110-1-6-C/D	5	14	20	25	29	40	41	57	66	78	56	62
AMI-M110-1-10-C/D	5	15	21	26	29	39	40	60	64	67	67	64
AMI-M110-6-10-C/D	5	14	20	25	29	39	40	60	64	68	70	64
AMI-M110-1-20-C/D	5	15	20	26	29	40	42	60	68	70	70	67
AMI-M110-6-20-C/D	5	15	21	26	29	39	38	58	68	70	70	66
AMI-M-110-6-30-C/D	5	15	20	25	29	39	39	56	62	70	70	66

## Case Styles

STYLE A



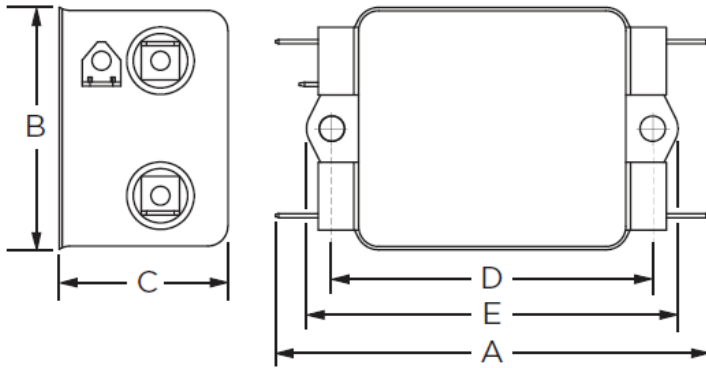
Typical Dimensions:

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 [4.75] Dia.

# High Performance RFI Line Filters

## Case Styles

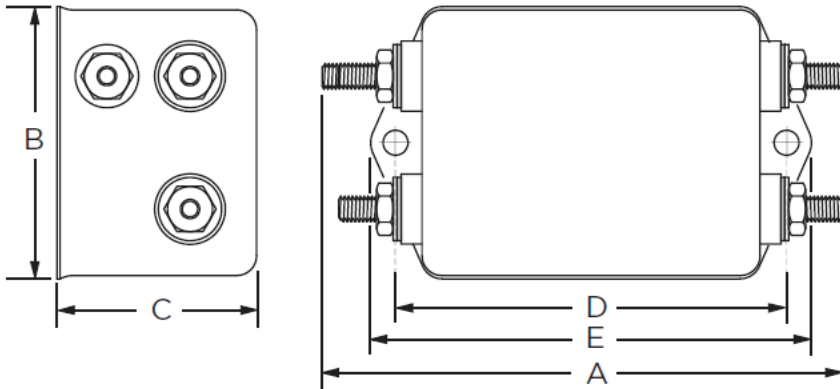
### STYLE B



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 [4.75] Dia.

### STYLE C



Typical Dimensions:

Terminals (5):	8-32, Torque 18 lbf-in. [2.03 N-m] max. $\pm 2$ [.22]
Mounting Holes (2):	.188 [4.75] Dia.



# High Performance RFI Line Filters

## Case Dimensions:

Model Number	A max	B max	C max	D $\begin{smallmatrix} \pm .015 \\ \pm .38 \end{smallmatrix}$	E max
AMI-M110-1-6	3.36"/85.34m	1.82"/46.23mm	0.91"/23.11mm	2.375"/60.325mm	2.78"/70.61mm
AMI-M110-1-10	3.36"/85.34m	1.82"/46.23mm	1.28"/32.51mm	2.375"/60.325mm	2.78"/70.61mm
AMI-M110-6-10	3.47"/88.14mm	1.82"/46.23mm	1.53"/38.86mm	2.375"/60.325mm	2.78"/70.61mm
AMI-M110-1-20	3.85"/97.79mm	2.07"/52.58mm	1.31"/33.27mm	2.938"/74.625mm	3.35"/85.09mm
AMI-M110-6-20	4.00"/101.60mm	2.07"/52.58mm	1.53"/38.86mm	2.938"/74.625mm	3.35"/85.09mm
AMI-M110-6-30	4.92"/124.97mm	2.07"/52.58mm	1.53"/38.86mm	3.947"/100.254mm	4.33"/109.98mm