

# General Purpose RFI Power Line Filters



AMI-M11J/11K/11L/11M Series  
Metal Enclosure Single Phase Single Stage Filters

AMI Designation	Input/output Style				Current Rating	Inductance	Capacitance		Resistor	Leakage Current @ 120 VAC 60Hz/250 VAC 50 Hz	TIL Insertion Loss	Case Style
	Available Part Numbers	6.3mm Spade Terminals	Wire Leads	Threaded Bolts		IEC	mH	Cx	Cy			
nF					pF							
AMI-M11J-1-1-B-1	1	-	-	-	1	1.86	200	5500	1500	0.5/1.0	005	A
AMI-M11J-1-1-B-2	1	-	-	-	1	1.86	200	2800	1500	0.21/0.36	001	A
AMI-M11J-3-1-B-1	-	3	-	-	1	1.86	200	5500	1500	0.5/1.0	005	C
AMI-M11J-3-1-B-2	-	3	-	-	1	1.86	200	2800	1500	0.21/0.36	001	C
AMI-M11J-1-2-B-1	1	-	-	-	2	0.539	200	5500	1500	0.5/1.0	006	A
AMI-M11J-1-2-B-2	1	-	-	-	2	0.539	200	2800	1500	0.21/0.36	002	A
AMI-M11J-3-2-B-1	-	3	-	-	2	0.539	200	5500	1500	0.5/1.0	006	C
AMI-M11J-3-2-B-2	-	3	-	-	2	0.539	200	2800	1500	0.21/0.36	002	C
AMI-M11J-1-3-B-1	1	-	-	-	3	1.76	200	5500	1500	0.5/1.0	007	A
AMI-M11J-1-3-B-2	1	-	-	-	3	1.76	200	2800	1500	0.21/0.36	001	A
AMI-M11J-3-3-B-1	-	3	-	-	3	1.76	200	5500	1500	0.5/1.0	007	C
AMI-M11J-3-3-B-2	-	3	-	-	3	1.76	200	2800	1500	0.21/0.36	001	C
AMI-M11K-7-3-B-1	-	-	-	7	3	1.76	200	5500	1500	0.5/1.0	007	H
AMI-M11K-7-3-B-2	-	-	-	7	3	1.76	200	2800	1500	0.21/0.36	001	H
AMI-M11K-7M-3-B-1	-	-	-	7	3	1.76	200	5500	1500	0.5/1.0	007	H
AMI-M11K-7M-3-B-2	-	-	-	7	3	1.76	200	2800	1500	0.21/0.36	001	H

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AMI Designation	Input/output Style				Current Rating	Inductance mH	Capacitance		Resistor K $\Omega$	Leakage Current @ 120 VAC 60Hz/250 VAC 50 Hz	TIL Insertion Loss	Case Style
	6.3mm Spade Terminals	Wire Leads	Threaded Bolts	IEC			Cx nF	Cy pF				
AMI-M11J-1-5-B-1	1	-	-	-	5	0.516	200	5500	1500	0.5/1.0	008	A
AMI-M11J-1-5-B-2	1	-	-	-	5	0.516	200	2800	1500	0.21/0.36	003	A
AMI-M11J-3-5-B-1	-	3	-	-	5	0.516	200	5500	1500	0.5/1.0	008	C
AMI-M11J-3-5-B-2	-	3	-	-	5	0.516	200	2800	1500	0.21/0.36	003	C
AMI-M11K-7-5-B-1	-	-	-	7	5	0.516	200	5500	1500	0.5/1.0	008	H
AMI-M11K-7-5-B-2	-	-	-	7	5	0.516	200	2800	1500	0.21/0.36	003	H
AMI-M11K-7M-5-B-1	-	-	-	7	5	0.516	200	5500	1500	0.5/1.0	008	H
AMI-M11K-7M-5-B-2	-	-	-	7	5	0.516	200	2800	1500	0.21/0.36	003	H
AMI-M11J-1-10-B-1	1	-	-	-	10	1.76	200	5500	1500	0.5/1.0	009	A
AMI-M11J-1-10-B-2	1	-	-	-	10	0.495	200	2800	1500	0.21/0.36	002	A
AMI-M11J-3-10-B-1	-	3	-	-	10	0.495	200	5500	1500	0.5/1.0	009	C
AMI-M11J-3-10-B-2	-	3	-	-	10	0.495	200	2800	1500	0.21/0.36	002	C
AMI-M11K-7-10-B-1	-	-	-	7	10	0.495	200	5500	1500	0.5/1.0	009	H
AMI-M11K-7-10-B-2	-	-	-	7	10	0.495	200	2800	1500	0.21/0.36	002	H
AMI-M11K-7M-10-B-1	-	-	-	7	10	0.495	200	5500	1500	0.5/1.0	009	H
AMI-M11K-7M-10-B-2	-	-	-	7	10	0.495	200	2800	1500	0.21/0.36	002	H

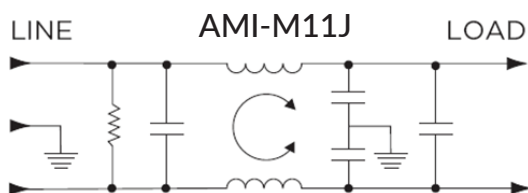
# General Purpose RFI Power Line Filters

AMI Designation	Input/output Style				Current Rating	Inductance	Capacitance		Resistor	Leakage Current @ 120 VAC 60Hz/250 VAC 50 Hz	TIL Insertion Loss	Case Style
							Cx	Cy				
Available Part Numbers	6.3mm Spade Terminals	Wire Leads	Threaded Bolts	IEC		mH	nF	pF	K $\Omega$			
AMI-M11J-1-20-B-1	1	-	-	-	20	0.44	200	5500	1500	0.5/1.0	010	B
AMI-M11J-1-20-B-2	1	-	-	-	20	0.44	200	2800	1500	0.21/0.36	004	B
AMI-M11J-6-10-B	-	-	6	-	10	0.495	200	5500	1500	0.5/1.0	009	D
AMI-M11J-6-20-B	-	-	6	-	20	0.44	200	5500	1500	0.5/1.0	010	E
AMI-M11K-7-20-B	-	-	-	7	20	0.44	200	5500	1500	0.5/1.0	010	I
AMI-M11J-6-30-B	-	-	6C	-	30	0.69	940	5500	235	0.5/1.0	011	F
AMI-M11L-6-30-B	-	-	6	-	30	0.69	940	5500	235	0.5/1.0	011	F
AMI-M11J-6-40-B	-	-	6	-	40	0.59	940	5500	235	0.5/1.0	012	F
AMI-M11L-6-40-B	-	-	6C	-	40	0.59	940	5500	235	0.5/1.0	012	F
AMI-M11M-6-60-B	-	-	6	-	60	0.37	940	5500	235	0.5/1.0	013	G

\*(M) = Metric Inserts

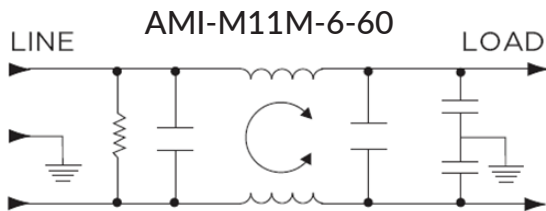
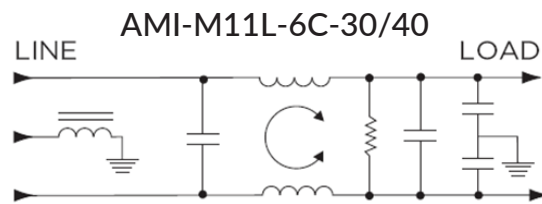
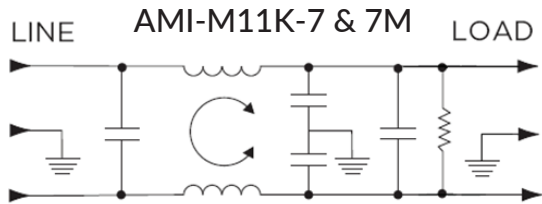
\*\* (C) = Ground Choke

## Electrical Schematic



# General Purpose RFI Power Line Filters

## Electrical Schematic



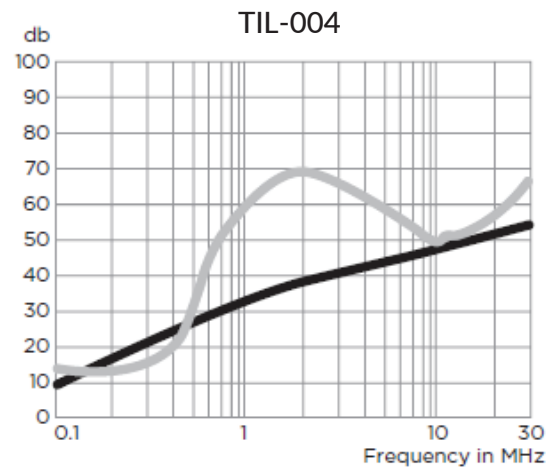
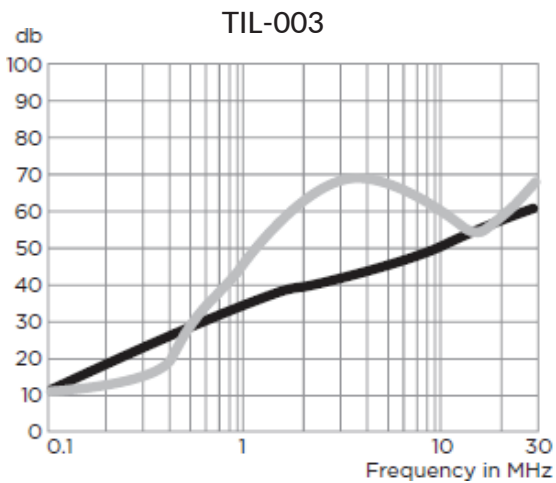
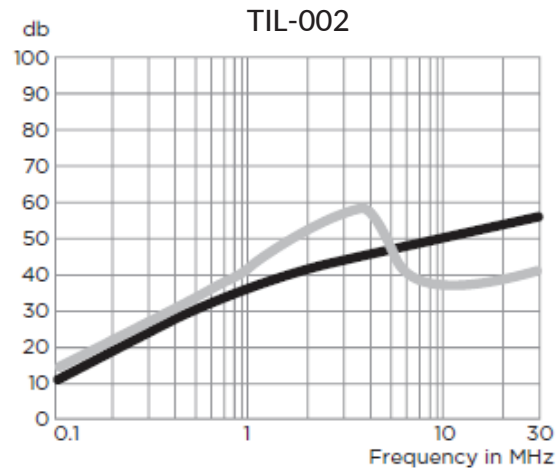
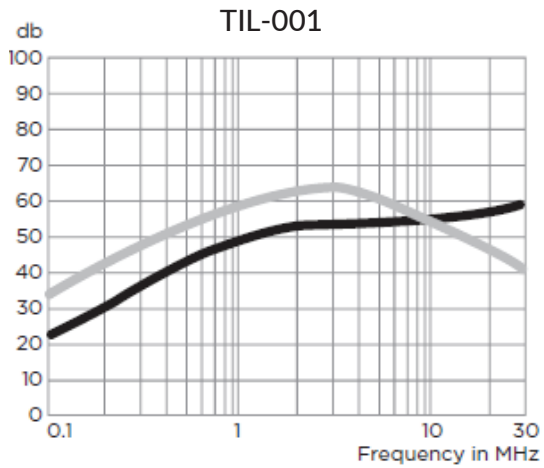
## Specifications:

- Rated Voltage (max): 250 VAC
- Operating Frequency: 50/60 Hz
- Operating Current: 1 to 60 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:  $I_o = I_r \sqrt{[(85 - T_a)/45]}$

# General Purpose RFI Power Line Filters

## Performance Data Typical Insertion Loss

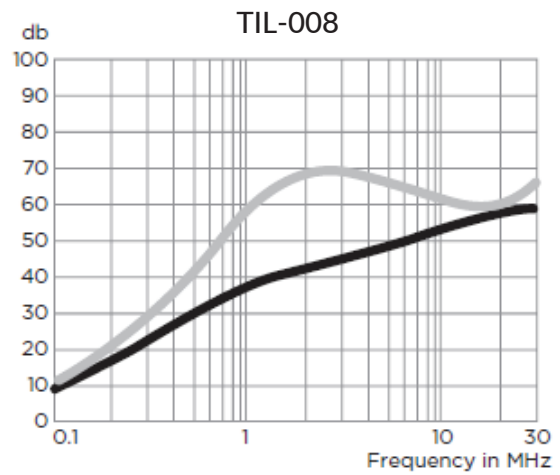
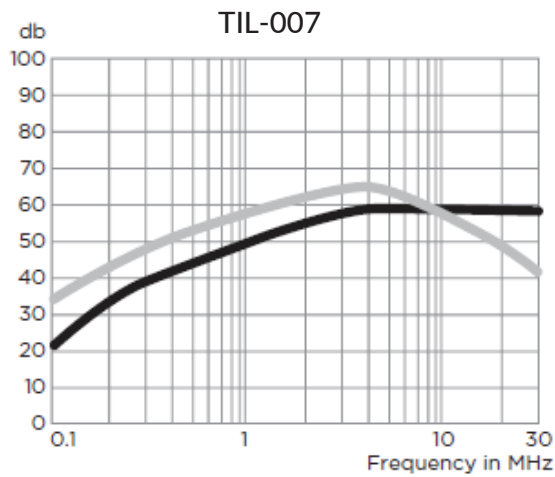
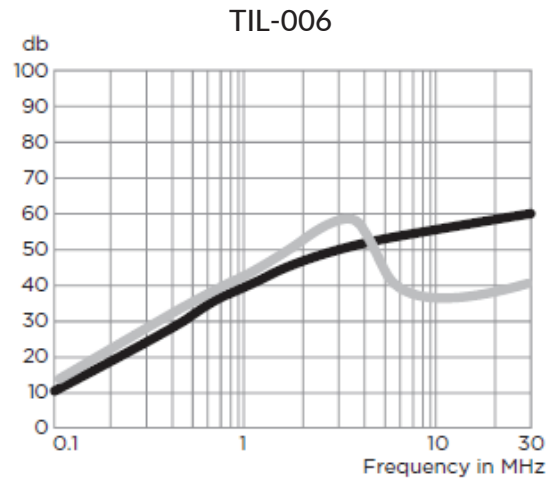
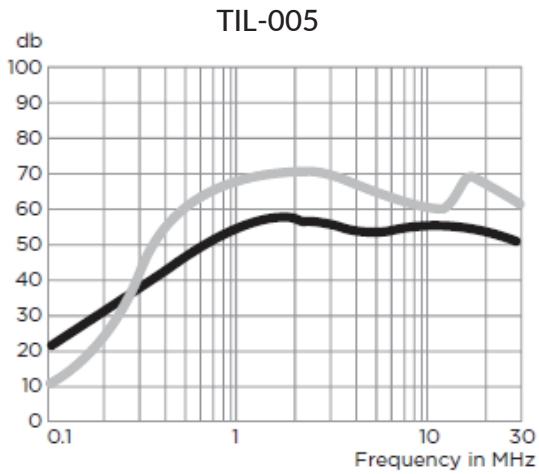
Measured in closed 50 Ohm system



# General Purpose RFI Power Line Filters

## Performance Data Typical Insertion Loss

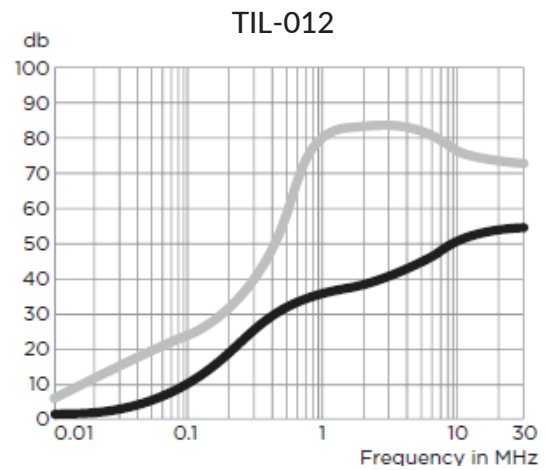
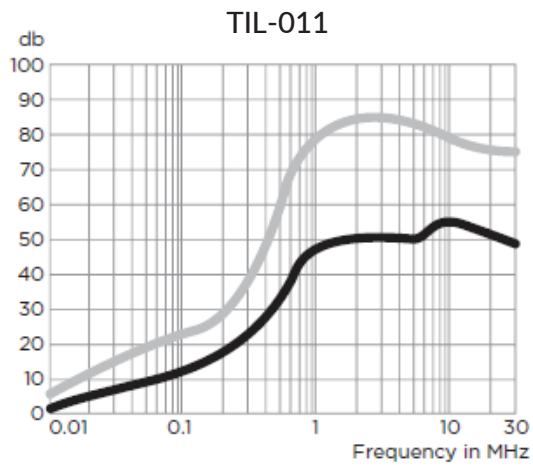
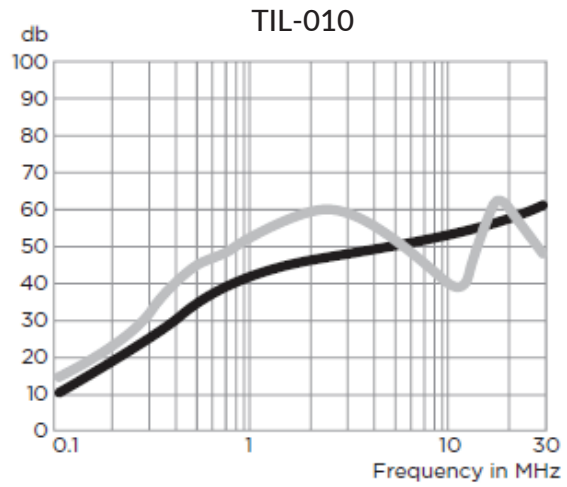
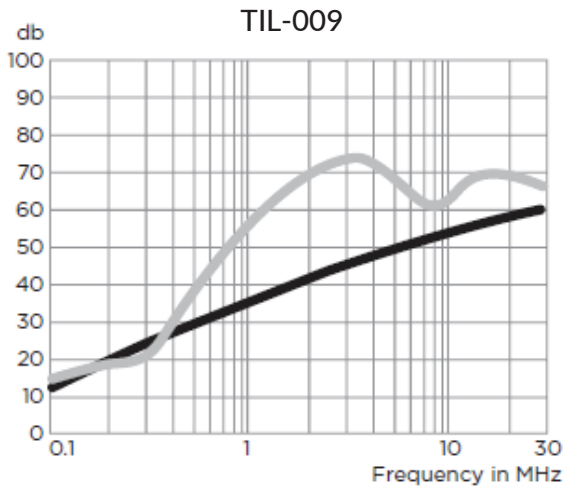
Measured in closed 50 Ohm system



# General Purpose RFI Power Line Filters

## Performance Data Typical Insertion Loss

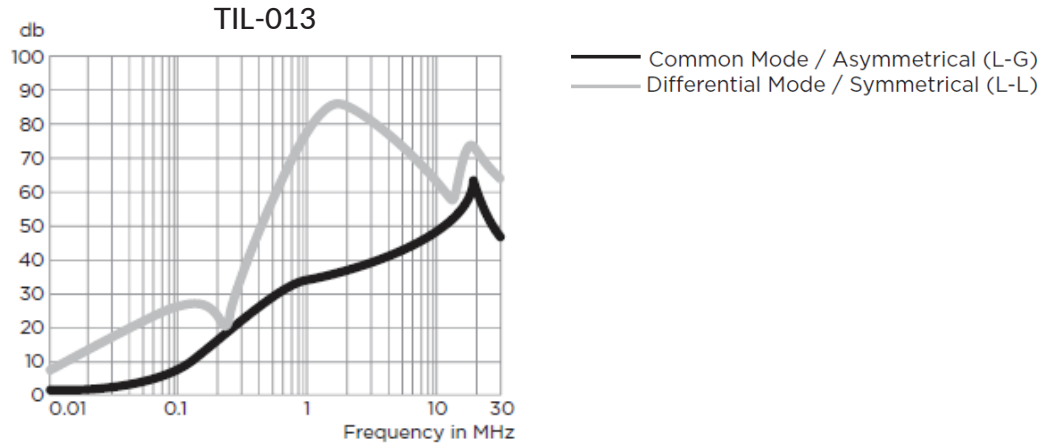
Measured in closed 50 Ohm system



# General Purpose RFI Power Line Filters

## Performance Data Typical Insertion Loss

Measured in closed 50 Ohm system



## Minimum Insertion Loss

Common Mode/Asymmetrical (Line to Ground)

Current Rating	Frequency-MHz					
	.15	.5	1	5	10	30
<i>M11J/K/L/M F-X-X-B-1</i>						
1A, 3A	15	30	38	50	50	50
2A, 5A, 10A	6	19	28	42	45	50
20A	6	19	28	42	45	50
30A, 40A	6	19	28	42	45	50
60A	6	22	28	32	39	35
<i>M11J/K-X-X-B-2</i>						
1A, 3A	15	29	35	45	45	50
2A, 5A, 10A	8	19	25	38	40	45
20A	8	19	25	38	40	45



# General Purpose RFI Power Line Filters

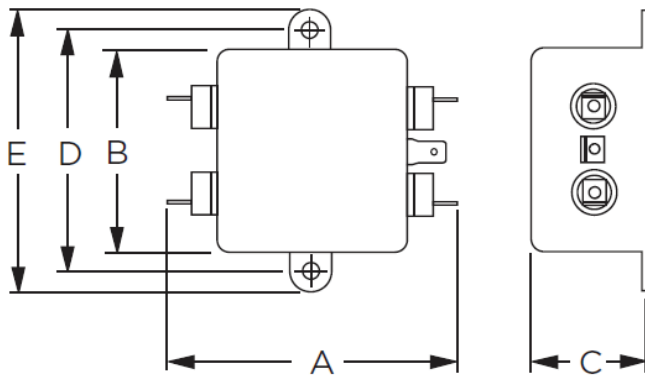
## Minimum Insertion Loss

Differential Mode/Symmetrical (Line to Line)

Current Rating	Frequency-MHz					
	.15	.5	1	5	10	30
<i>M11J/K/L/M-X-X-B-1</i>						
1A, 3A	-	-	48	55	50	35
2A, 5A, 10A	-	-	30	50	30	30
20A	6	6	30	50	30	30
30A, 40A	2	40	60	65	57	55
60A	13	49	67	57	53	53
<i>M11J/K-X-X-B-2</i>						
1A, 3A	-	-	48	55	50	35
2A, 5A, 10A	-	-	30	50	30	30
20A	6	6	30	50	30	30

## Case Styles

STYLE A



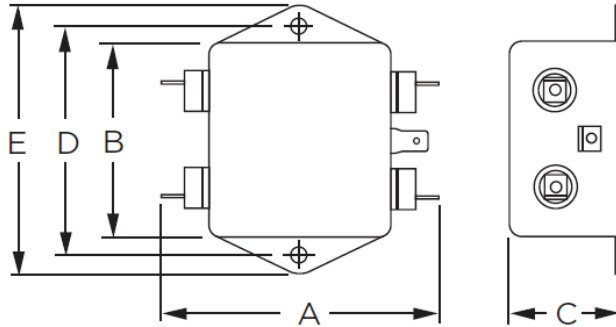
Typical Dimensions:

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 [4.78] Dia.

# General Purpose RFI Power Line Filters

## Case Styles

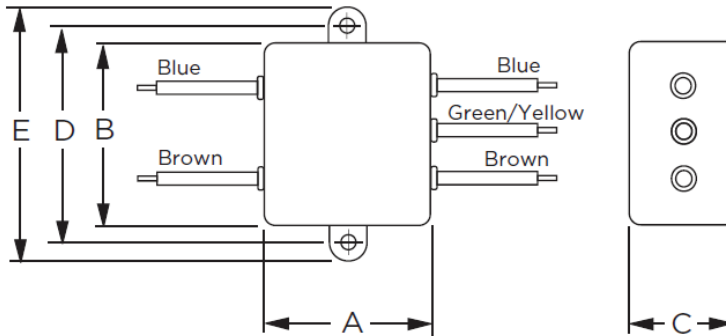
### STYLE B



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 [4.78] Dia.

### STYLE C



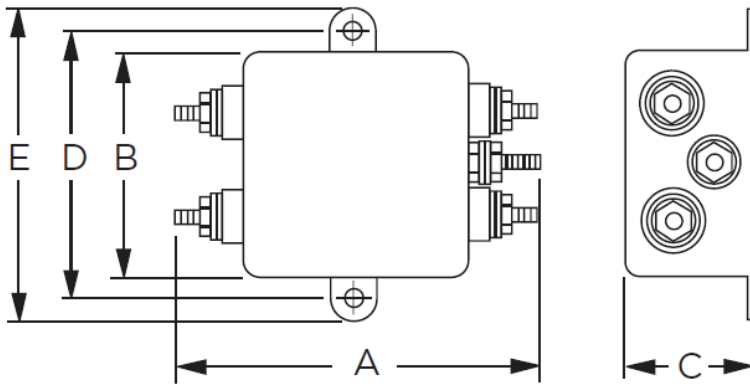
Typical Dimensions:

Wire Leads (5):	4.0 [101.6] Min., AWG18 (AWG16 for 10A)
Mounting Holes (2):	.188 [4.78] Dia.

# General Purpose RFI Power Line Filters

## Case Styles

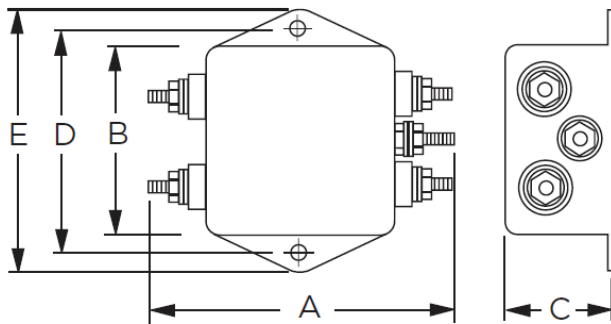
### STYLE D



Typical Dimensions:

Terminals (5): 8-32, Torque 18 lbf-in. [2.03 N-m] max.  $\pm 2$  [.22]  
Mounting Holes (2): .188 [4.78] Dia.

### STYLE E



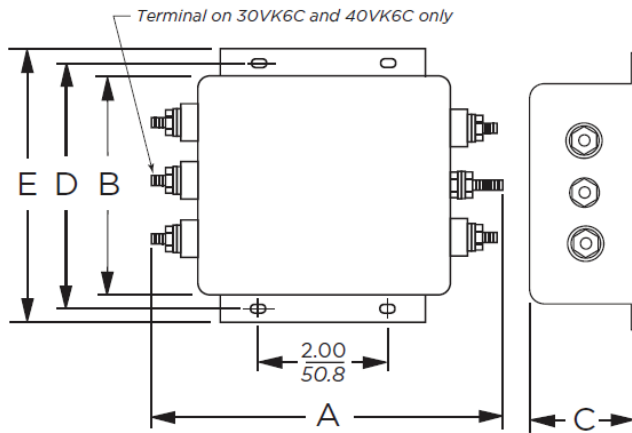
Typical Dimensions:

Terminals (5): 8-32, Torque 18 lbf-in. [2.03 N-m] max.  $\pm 2$  [.22]  
Mounting Holes (2): .188 [4.78] Dia.

# General Purpose RFI Power Line Filters

## Case Styles

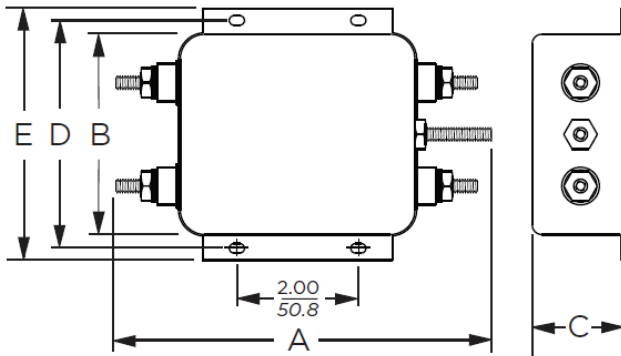
### STYLE F



Typical Dimensions:

Terminals (5): 8-32, Torque 18 lbf-in. [2.03 N-m] max.  $\pm 2$  [.22]  
Mounting Slots (4): .250 x .156 [6.35 x 3.96] Dia.

### STYLE G



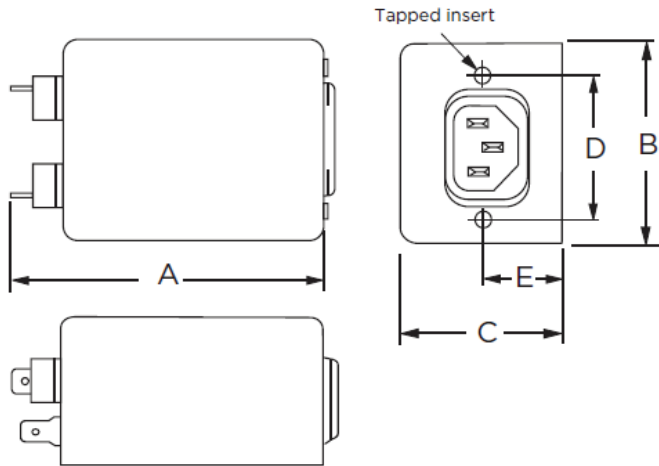
Typical Dimensions:

Terminals (5): 1/4-20, Torque 56 lbf-in. [6.32 N-m] max.  $\pm 2$  [.22]  
Mounting Slots (4): .250 x .156 [6.35 x 3.96] Dia.

# General Purpose RFI Power Line Filters

## Case Styles

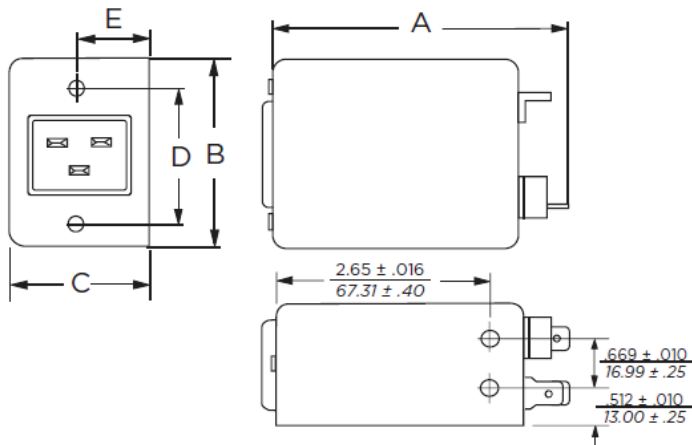
### STYLE H



Typical Dimensions:

Load Terminals (2):	.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
Line Inlet (1):	IEC 60320-1 C14
K7 Tapped Inserts (2):	6-32 x 1/4
K7M Tapped Inserts (2):	M3 x .5

### STYLE I



Typical Dimensions:

Load Terminals (2):	.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
Line Inlet (1):	IEC 60320-1 C20
K7 Tapped Inserts (2):	6-32 x 1/4
K7M Tapped Inserts (2):	M3 x .5

# General Purpose RFI Power Line Filters

## Mechanical Dimensions:

Model Number	A max	B max	C max	D $\frac{\pm .15}{\pm .38}$	E max
AMI-M11J-1-1/2	3.1"/78.7mm	2.07"/52.6mm	0.91"/23.1mm	2.375"/60.33mm	2.81"/74.1mm
AMI-M11J-3-1/2	1.81"/46.0mm	2.07"/52.6mm	0.91"/23.1mm	2.375"/60.33mm	2.81"/74.1mm
AMI-M11J-1-3/5	3.1"/78.7mm	2.07"/52.6mm	1.16"/29.5mm	2.375"/60.33mm	2.81"/74.1mm
AMI-M11J-3-3/5	1.81"/46.0mm	2.07"/52.6mm	1.16"/29.5mm	2.375"/60.33mm	2.81"/74.1mm
AMI-M11K-7/7M-3/5	3.21"/81.5mm	2.25"/57.2mm	1.28"/32.5mm	1.575"/40.01mm	0.63"/16.0mm
AMI-M11J-1-10	3.35"/85.1mm	2.07"/52.6mm	1.16"/29.5mm	2.375"/60.33mm	2.81"/71.4mm
AMI-M11J-3-10	2.07"/52.6mm	2.07"/52.6mm	1.16"/29.5mm	2.375"/60.33mm	2.81"/71.4mm
AMI-M11J-6-10	3.46"/87.9mm	2.07"/52.6mm	1.16"/29.5mm	2.375"/60.33mm	2.81"/71.4mm
AMI-M11K-7/7M-10	3.71"/94.2mm	2.25"/57.2mm	1.28"/32.5mm	1.575"/40.01mm	0.63"/16.0mm
AMI-M11J-1-20	3.35"/85.1mm	2.56"/65.0mm	1.53"/38.9mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M11J-6-20	3.46"/87.9mm	2.56"/65.0mm	1.53"/38.9mm	2.938"/74.63mm	3.35"/85.1mm
AMI-M11K-7-20	3.8"/90.4mm	2.28"/54.6mm	1.78"/39.6mm	1.575"/74.63mm	.846"/85.8mm
AMI-M11J-6-30, AMI-M11J-6C-30	5.34"/135.6mm	3.38"/85.9mm	1.53"/38.9mm	3.75"/95.25mm	4.20"/106.7mm
AMI-M11J-6-40, AMI-M11L-6C-40	5.34"/135.6mm	3.38"/85.9mm	1.53"/38.9mm	3.75"/95.25mm	4.20"/106.7mm
AMI-M11M-6-60	6.0"/152.4mm	3.38"/85.9mm	1.53"/38.9mm	3.75"/95.25mm	4.20"/106.7mm