

PCB Power Filters Miniature Printed Circuit Board

61-MPC Series



Tested and found to be
IAW VDE 0565 Part 3

Features

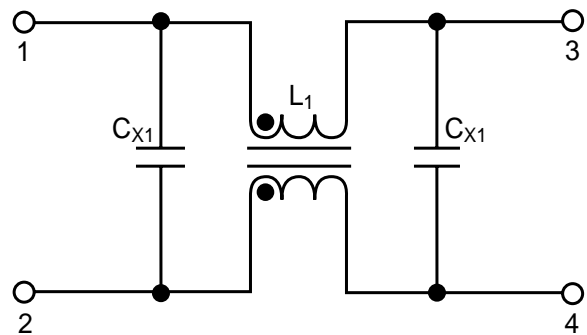
- Miniature general purpose PCB mounted filter
- Requires minimal PCB real estate space
- Low cost
- Designed for two wire cord systems
- For three wire cord systems, Y capacitors can be attached externally
- Operating temperature: -25°C to +85°C (including temperature rise, see graph on page 53)

Applications

- Personal computers and peripherals
- Digital equipment
- Measuring instruments and medical equipment
- TV & VCR monitors and display units
- Home appliances



Circuit Diagram



PCB Power Filters

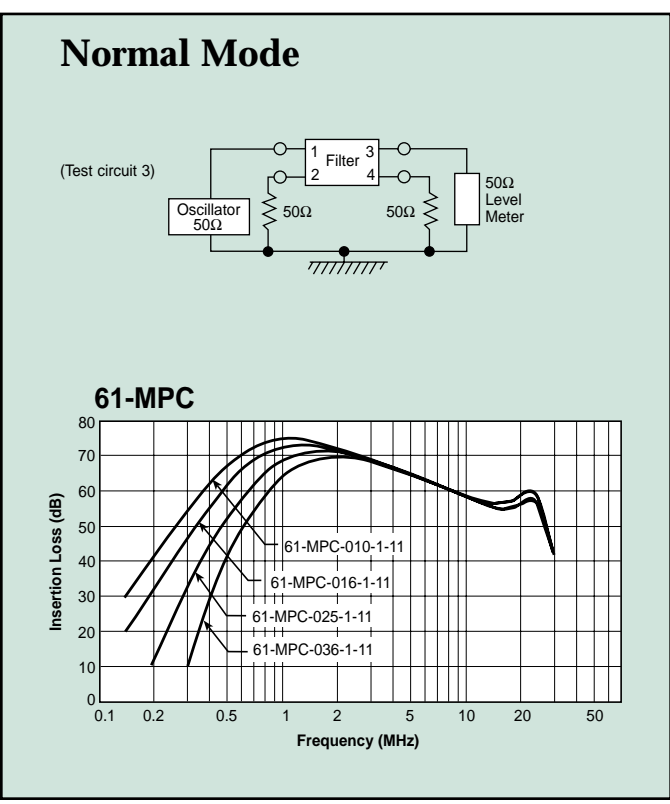
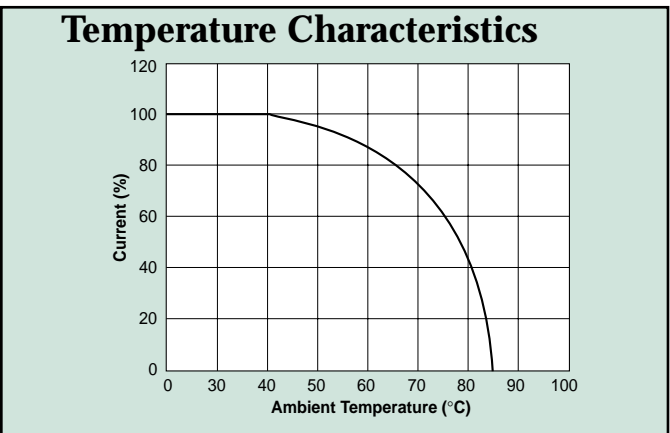
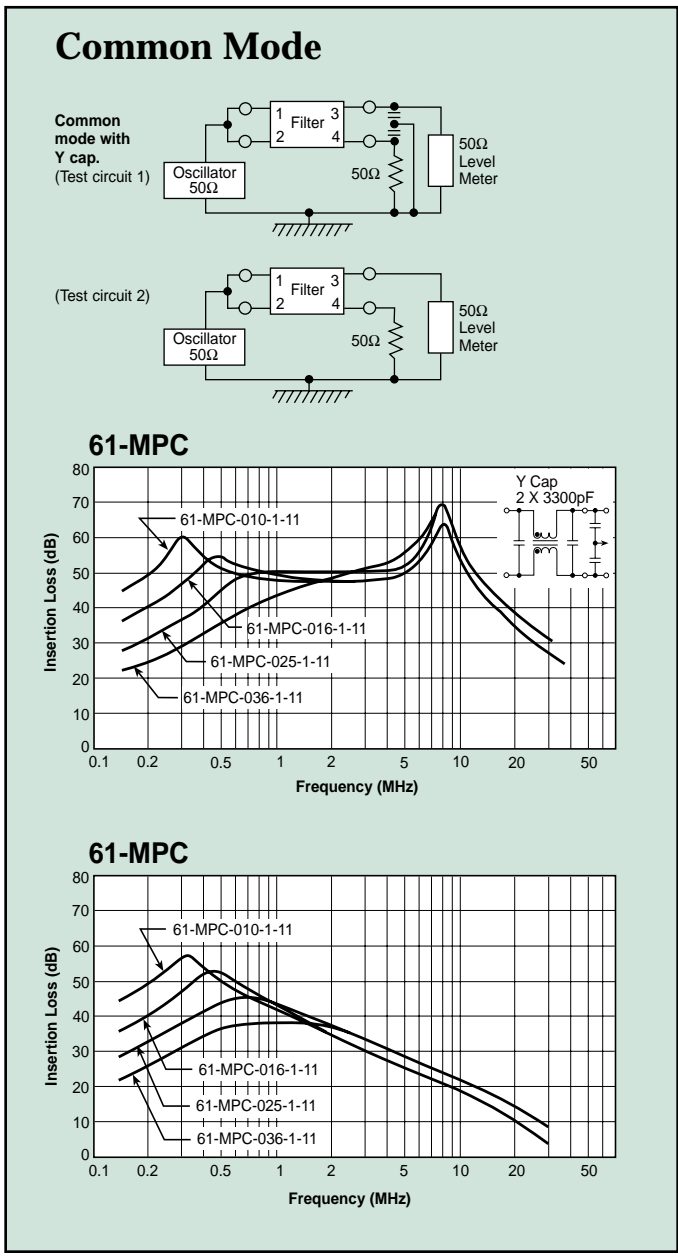
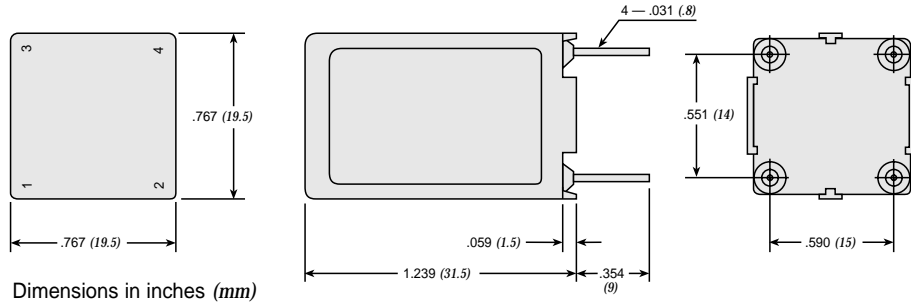
Specifications

Model	Rated Voltage (@ 50/60Hz)	Rated Current	Leakage Current (Max.)	Capacitance		Inductance (L ₁)	Temperature Rise (Max.)
				C _{X1}	C _{X2}		
61-MPC-010-1-11	250VAC	1A	0.1mA	0.01uF	0.01uF	11mH	40°C
61-MPC-016-1-11		1.6A				6.0mH	
61-MPC-025-1-11		2.5A				2.4mH	
61-MPC-036-1-11		3.6A				1.2mH	

Note: Test voltage: 1500VAC one minute, line to ground
 Insulation resistance: 300 Mohm min. at 500VDC
 Voltage drop: 1V max. at rated current
 Weight: 17.5g

PCB Power Filters Miniature Printed Circuit Board

61-MPC Series



PCB Power Filters

Power Entry Modules Bolt-in Right Angle Terminals for PCB Applications

60-BPP Series

Features

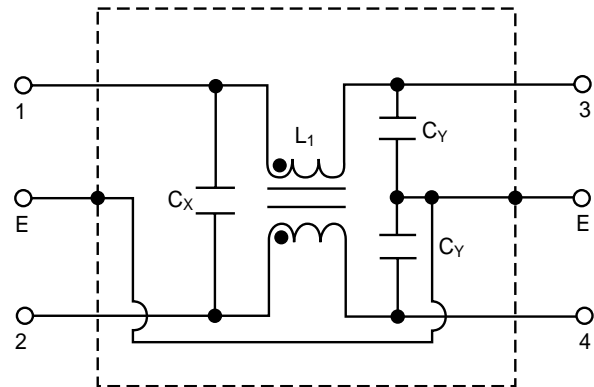
- Ideally suited for products that must conform to FCC part 15 regulations
- Metal case offers high performance
- Meets over voltage of IEC 664 category II and complies with IEC 950
- Uses IEC connector that meets most safety standards Solder lug, Fast-on tab styles available (see page 26)
- PCB mounting style minimizes space and provides economical installation
- Operating temperature: -25°C to +85°C (including temperature rise, see graph on page 55)
- UL approved low leakage version also available



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Circuit Diagram



Applications

- Digital equipment
- Personal computers and peripherals
- Measuring instruments
- Monitor and display units

Specifications

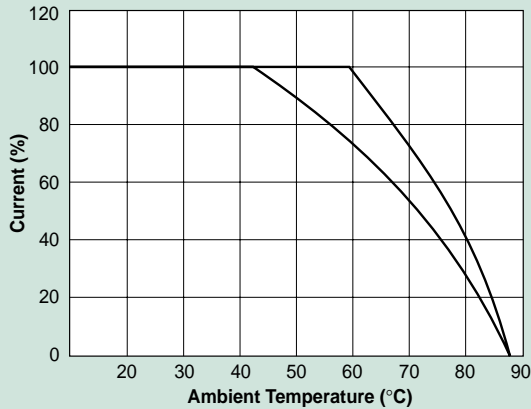
Model	Rated Voltage (@ 50/60Hz)	Rated Current	Leakage Current (Max.)	Capacitance		Inductance (L ₁)	Temperature Rise (Max.)	
				C _Y	C _X			
60-BPP-010-3-2	250VAC	1A	0.35mA	2200pF	0.022uF	6.0mH	30°C	
60-BPP-010-3-4					0.047uF			
60-BPP-010-5-2			0.50mA	3300pF	0.022uF			
60-BPP-010-5-4					0.047uF			
60-BPP-020-3-2		2A	0.35mA	2200pF	0.022uF	2.4mH		
60-BPP-020-3-4					0.047uF			
60-BPP-020-5-2			0.50mA	3300pF	0.022uF			
60-BPP-020-5-4					0.047uF			
60-BPP-030-3-2		3A	0.35mA	2200pF	0.022uF	1.2mH		
60-BPP-030-3-4					0.047uF			
60-BPP-030-5-2			0.50mA	3300pF	0.022uF			
60-BPP-030-5-4					0.047uF			
60-BPP-060-3-2		6A	0.35mA	2200pF	0.022uF	0.53mH		45°C
60-BPP-060-3-4					0.047uF			
60-BPP-060-5-2			0.50mA	3300pF	0.022uF			
60-BPP-060-5-4					0.047uF			

Note: Test voltage: 1500VAC one minute, line to ground
 Insulation resistance: 300 Mohm min. at 500VDC
 Voltage drop: 1V max. at rated current
 Weight: 50g
 Input: Compatible with IEC-320

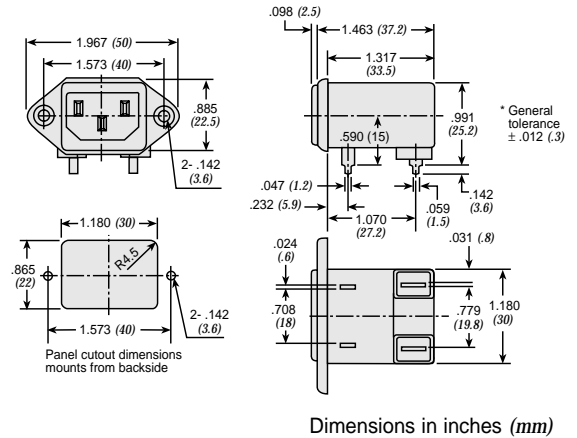
Power Entry Modules Bolt-in Right Angle Terminals for PCB Applications

60-BPP Series

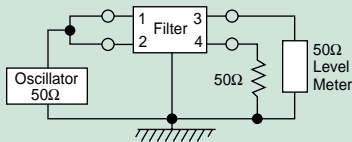
Temperature Characteristics



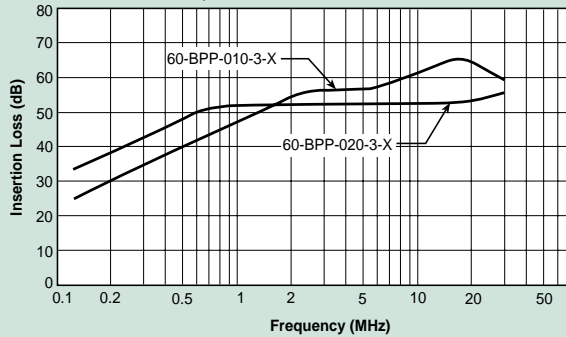
60-BPP PCB Mounting Type



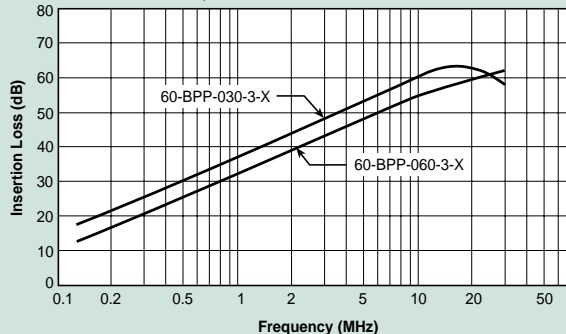
Common Mode



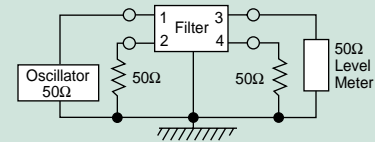
60-BPP-010;-020



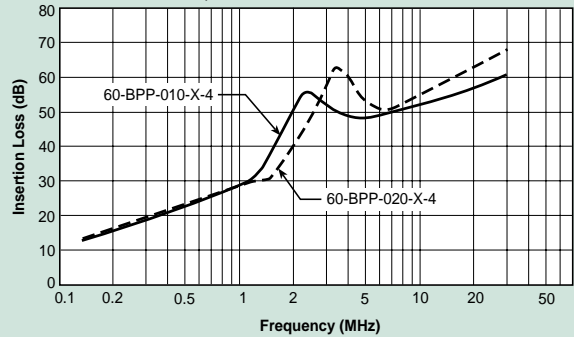
60-BPP-030;-060



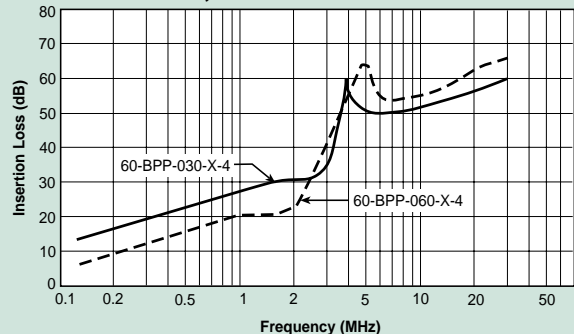
Normal Mode



60-BPP-010;-020



60-BPP-030;-060



Power Entry Modules

High Frequency Attenuation

Bolt-in for PCB Applications

60-BHP Series



Tested and found to be
IAW VDE 0565 Part 3

Features

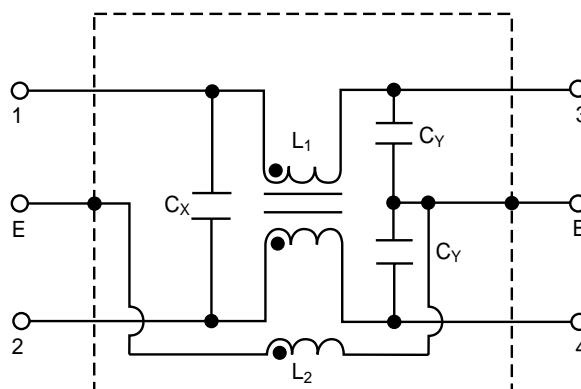
- Ideally suited for products that must conform to FCC part 15 regulations
- Metal cased filter offers high performance
- Meets over voltage of IEC 664 category II and complies with IEC 950
- Solder lug, Fast-on tab styles available (see page 28)
- PCB mounting minimizes space and provides economical installation
- Excellent filtering characteristics for high frequencies
- Earth coil standard
- Operating temperature: -25°C to +85°C (including temperature rise, see graph on page 57)

Applications

- Digital equipment
- Personal computers and peripherals
- Measuring instruments
- Monitor and display units



Circuit Diagram



Specifications

Model	Rated Voltage (@ 50/60Hz)	Rated Current	Leakage Current (Max.)	Capacitance		Inductance		Temperature Rise (Max.)	
				C _Y	C _X	(L ₁)	(L ₂)		
60-BHP-010-3-11	250VAC	1A	0.35mA	2200pF±20%	0.1uF±20%	6mH	18.3 uH	30°C	
60-BHP-010-3-4					.047uF±20%				
60-BHP-010-5-11					0.1uF±20%				
60-BHP-010-5-4					.047uF±20%				
60-BHP-020-3-11		2A	0.35mA	2200pF±20%	0.1uF±20%	2.4mH			
60-BHP-020-3-4					.047uF±20%				
60-BHP-020-5-11					0.1uF±20%				
60-BHP-020-5-4					.047uF±20%				
60-BHP-030-3-11		3A	0.35mA	2200pF±20%	0.1uF±20%	1.2mH			
60-BHP-030-3-4					.047uF±20%				
60-BHP-030-5-11					0.1uF±20%				
60-BHP-030-5-4					.047uF±20%				
60-BHP-060-3-11		6A	0.35mA	2200pF±20%	0.1uF±20%	0.53mH			45°C
60-BHP-060-3-4					.047uF±20%				
60-BHP-060-5-11					0.1uF±20%				
60-BHP-060-5-4					.047uF±20%				

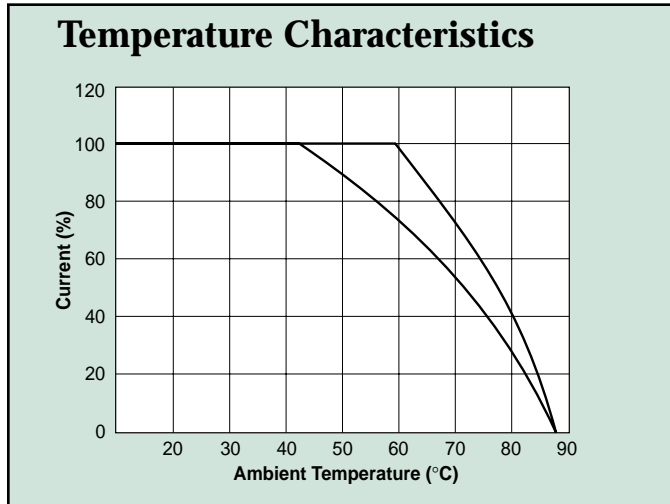
Note: Test voltage: 1500VAC one minute, line to ground
 Insulation resistance: 300 Mohm min. at 500VDC
 Voltage drop: 1V max. at rated current
 Weight: 50g
 Input: Compatible with IEC-320

Power Entry Modules

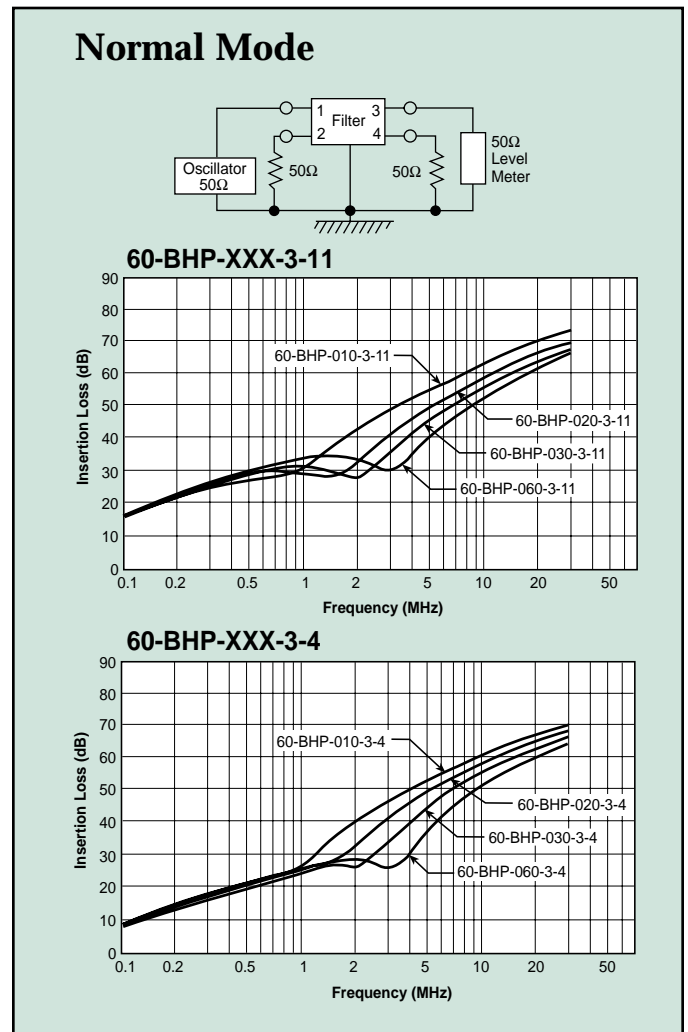
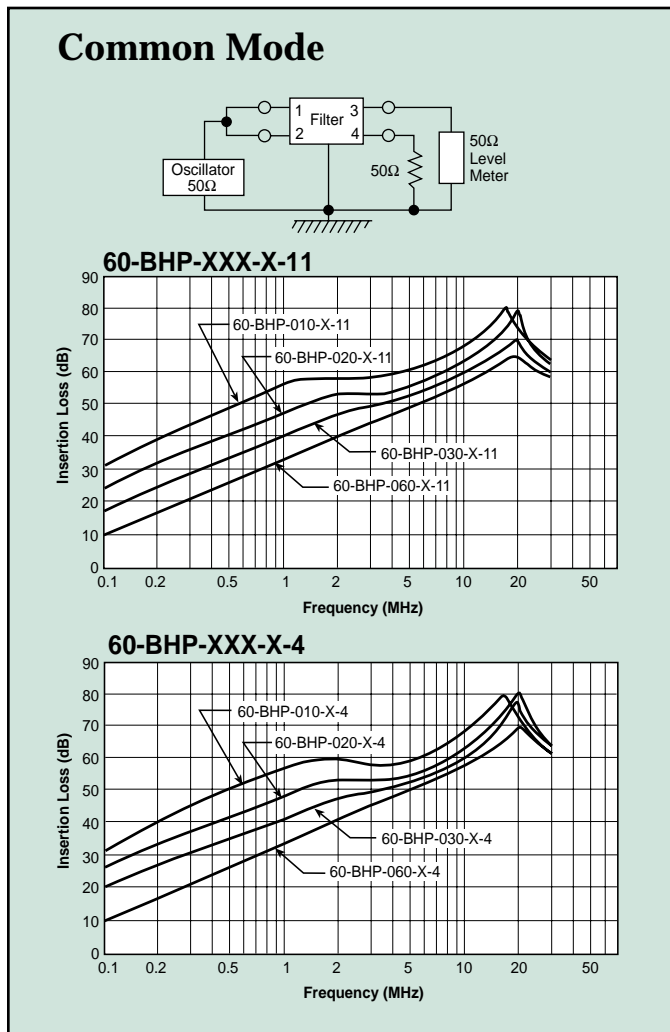
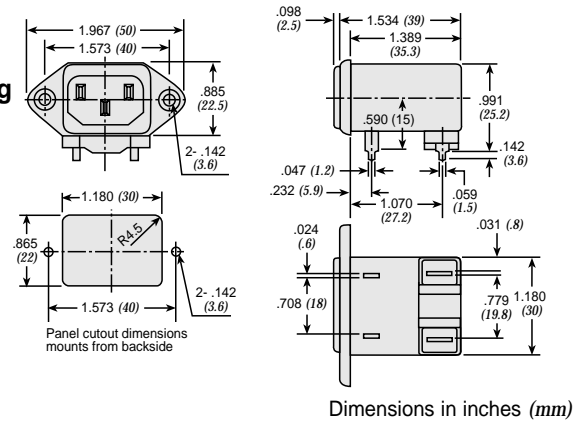
High Frequency Attenuation

Bolt-in for PCB Applications

60-BHP Series



60-BHP PCB Mounting Type



PCB Power Filters Miniature Printed Circuit Board

11-MPC Series

Features

- Miniature general purpose PCB mounted filter
- Requires minimal PCB real estate space
- Low cost
- Operating temperature: -25°C to +70°C
- Two forms of cases are available: metal case and plastic case

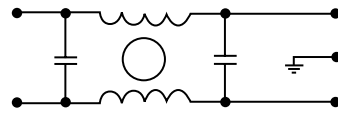
Applications

- Personal computers and peripherals
- Digital equipment
- Measuring instruments and medical equipment
- TV & VCR monitors and display units
- Home appliances

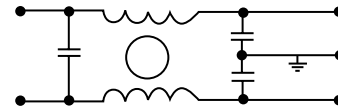


Circuit Diagram

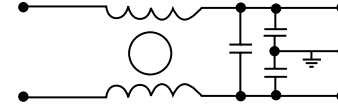
Circuit 1



Circuit 2



Circuit 3



Specifications

Model	Rated Voltage (@ 50/60Hz)	Rated Current	Leakage Current (Max.)	Circuit Diagram	Figure	Temperature Rise (Max.)
11-MPC-001-2-B	120/250VAC	1A	5uA	1	B	30°C
11-MPC-001-5-A				A		
11-MPC-001-5-B				B		
11-MPC-002-5-B		2A	0.50mA	2	D	
11-MPC-002-5-D				E		
11-MPC-003-5-E		3A	0.2mA	4	B	
11-MPC-006-5-B		6A			C	
11-MPC-006-5-C		16A			B	

Note: Test voltage: 1500VAC one minute, line to ground
 Insulation resistance: 300 Mohm min. at 500VDC
 Voltage drop: 1V max. at rated current
 Weight: 17.5g

PCB Power Filters Miniature Printed Circuit Board

11-MPC Series

Figure A

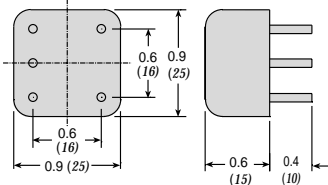


Figure B

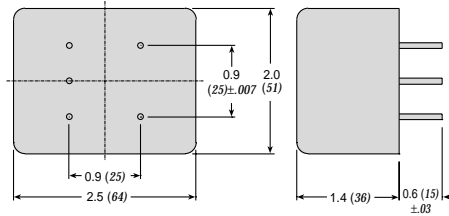


Figure C

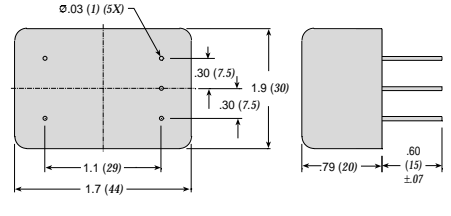


Figure D

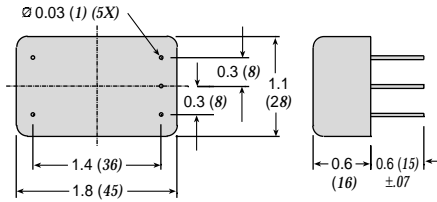
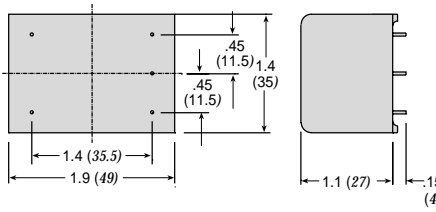
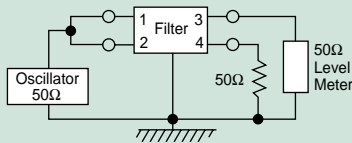


Figure E

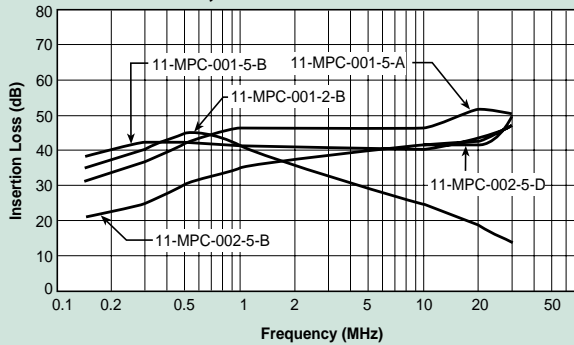


Dimensions in inches (mm)

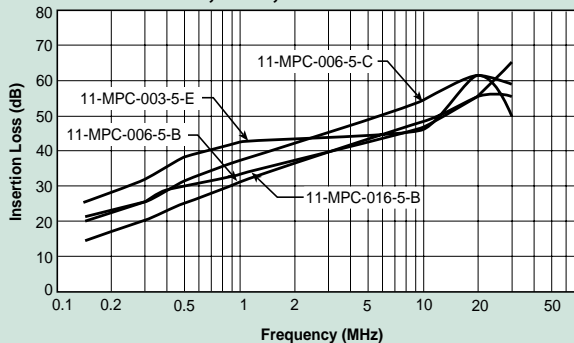
Common Mode



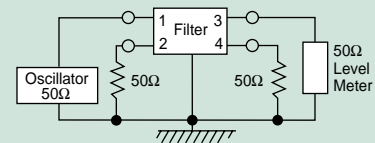
11-MPC-001;-002



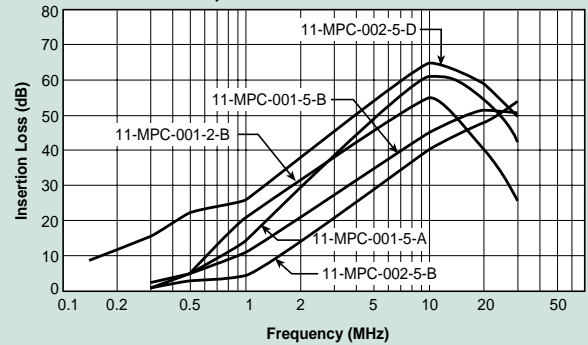
11-MPC-003;-006;-016



Normal Mode



11-MPC-001;-002



11-MPC-003;-006;-016

