

# Three Phase Power Line Filters

*Excellent attenuation for high voltage impulse.  
Epoxy molded for internal component reliability and  
metal case provides effective EMI shielding. Ideal for  
digital, industrial and automation equipment.*



Low Current/High Performance .....PF80-PF81

Three-Phase Power Line Filters.....PF82-PF83

High Performance .....PF84-PF89



# Power Line Filters Three Phase

Low Current/High Performance

## 62-PMB/63-PMF Series

### Features

- Excellent attenuation for high voltage impulse
- Effective for both balanced and unbalanced three-phase loads
- Metal case provides effective EMI shielding
- Epoxy molded for internal component reliability
- Compact and economical
- Excellent filtering characteristics for both normal and common mode
- Various current ratings available: 3, 5, 8 and 16 Amps
- Safety agency approvals pending
- Operating temperature: -25°C to +85°C (including temperature rise, see graph on page PF81)

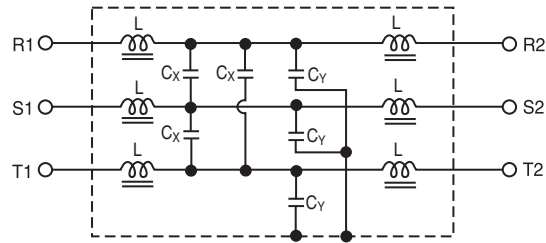
### Applications

- Digital equipment
- Industrial equipment (UPS, inverters and converters)
- Automation equipment
- Computerized washing machines

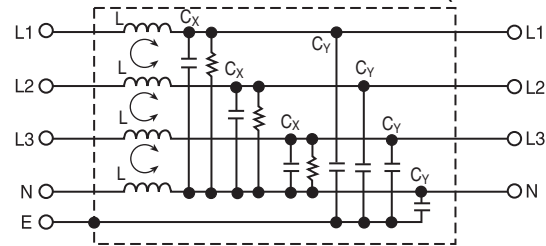


### Circuit Diagram

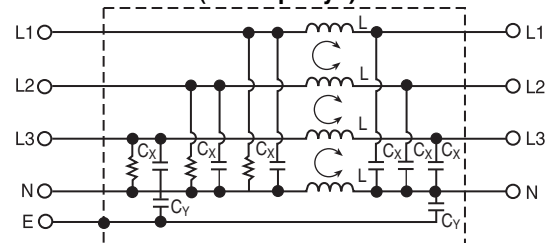
**62-PMB-050-6-12 (5 Amp Delta)**



**63-PMF-030-8-14 and 63-PMF-080-8-14 (3 and 8 Amp Wye)**



**63-PMF-160-9-21 (16 Amp Wye)**



### Specifications

| Model           | Rated Voltage (@ 50/60Hz) | Rated Current | Leakage Current (Max.) | Capacitance    |                | Inductance (L <sub>1</sub> ) | Temperature Rise (Max.) |
|-----------------|---------------------------|---------------|------------------------|----------------|----------------|------------------------------|-------------------------|
|                 |                           |               |                        | C <sub>Y</sub> | C <sub>X</sub> |                              |                         |
| 62-PMB-050-6-12 | 250VAC                    | 5A            | 0.6mA                  | 2200pF         | 0.22uF         | 115mH                        | 45°C                    |
| 63-PMF-030-8-14 | 480VAC                    | 3A            | 1.0mA                  | 4700pF (4X)    | 470uF (3X)     | 1.0mH (4X)                   | 30°C                    |
| 63-PMF-080-8-14 |                           | 8A            |                        |                |                | 0.74mH (4X)                  | 40°C                    |
| 63-PMF-160-9-21 |                           | 16A           | 3.0mA                  | 0.015uF (2X)   | 1.0uF (6X)     | 1.2mH (4X)                   | 45°C                    |

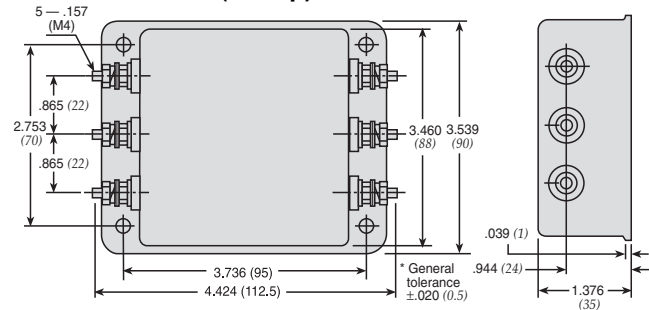
Note: Test Voltage 1500VAC one minute, line to ground.  
 Insulation Resistance: 300 MΩ min. at 500VDC.  
 Voltage Drop: 1V max. at rated current.  
 Weight: 8.82 ounces (250 grams) for 63-PMF-030-8-14 and 63-PMF-080-8-14  
 19.4 ounces (550 grams) for 62-PMB-050-6-12  
 51.5 ounces (1450 grams) for 63-PMF-160-9-21

# Power Line Filters Three Phase

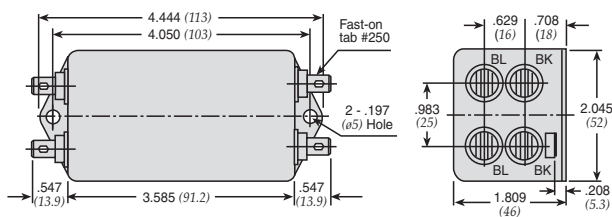
Low Current/High Performance

## 62-PMB/63-PMF Series

### 62-PMB-050-6-12 (5 Amp)

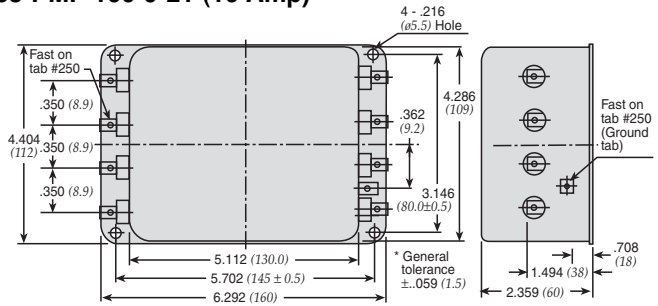


### 63-PMF-030-8-14 and 63-PMF-080-8-14 (3 and 8 Amp)



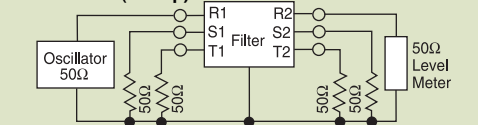
Dimensions in inches (mm)

### 63-PMF-160-9-21 (16 Amp)

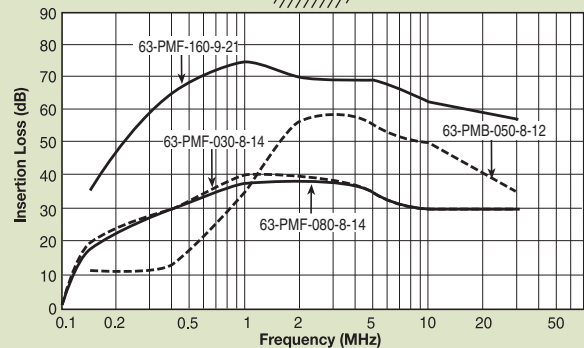
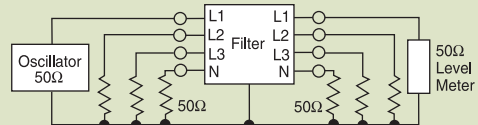


## Normal Mode

### 62-PMB-050-6-12 (5 Amp)

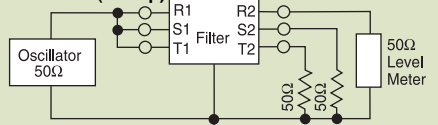


### 63-PMF (3, 8 and 16 Amp)

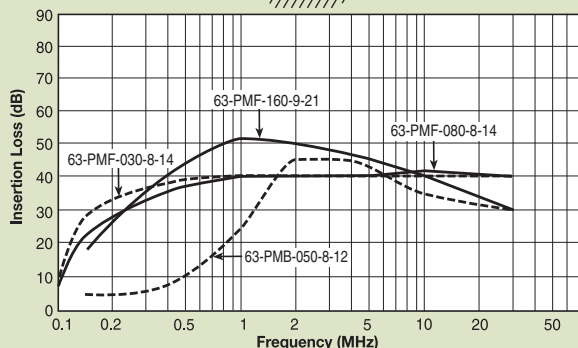
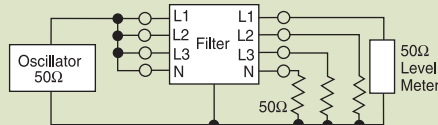


## Common Mode

### 62-PMB-050-6-12 (5 Amp)



### 63-PMF (3, 8 and 16 Amp)



# Power Line Filters Three Phase

## 13-PWF/PWL/PWB Series

### Features

- Excellent attenuation for high voltage impulse
- Effective for both balanced and unbalanced three-phase loads
- Metal case provides effective EMI shielding
- Epoxy molded for internal component reliability
- Suitable for both Wye and Delta connection
- Excellent filtering characteristics for both normal and common mode
- Operating temperature: -40°C to +85°C
- Designed for 3-phase 4-line power supply systems

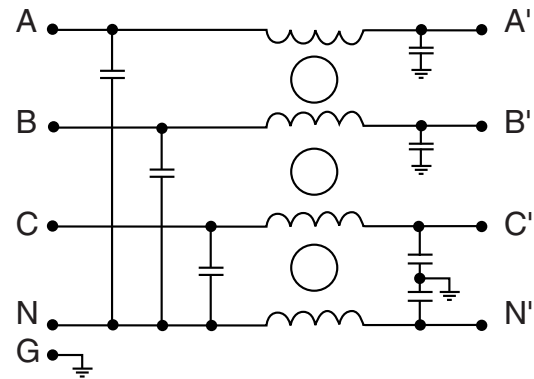
### Applications

- Digital equipment
- Industrial equipment (UPS, inverters and converters)
- Automation equipment
- Computerized washing machines

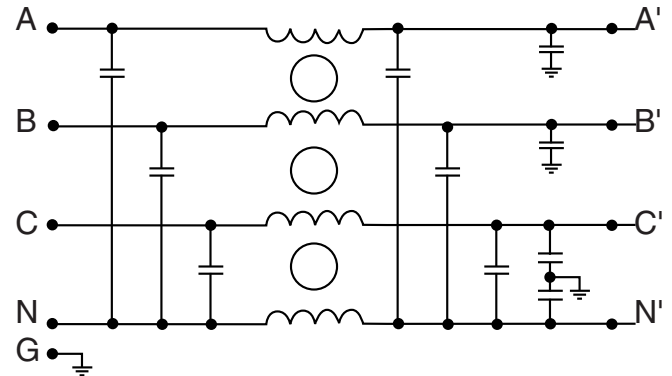


### Circuit Diagram

Circuit 1



Circuit 2



### Specifications

| Model           | Rated Voltage (@ 50/60Hz) | Rated Current | Leakage Current (Max.) | Circuit Diagram | Figure | Temperature Rise (Max.) |
|-----------------|---------------------------|---------------|------------------------|-----------------|--------|-------------------------|
| 13-PWF-005-12-H | 440/250VAC                | 5A            | 1.5mA                  | 1               | A      | 30°C                    |
| 13-PWL-005-12-C |                           |               |                        |                 | B      |                         |
| 13-PWF-010-12-H |                           | 10A           |                        |                 | A      |                         |
| 13-PWL-010-12-C |                           |               |                        |                 | B      |                         |
| 13-PWB-010-12-D |                           | 15A           |                        | 2               | C      |                         |
| 13-PWB-015-12-D |                           |               |                        |                 |        |                         |
| 13-PWB-020-12-D |                           |               |                        |                 |        |                         |
| 13-PWB-025-12-D |                           |               |                        |                 |        |                         |
| 13-PWB-025-12-D |                           |               |                        |                 |        |                         |
| 13-PWB-030-12-D |                           |               |                        |                 |        |                         |

Note: Test Voltage 1500VAC one minute, line to ground.  
Insulation Resistance: 300 MΩ min. at 500VDC.  
Voltage Drop: 1V max. at rated current.

# Power Line Filters Three Phase

## 13-PWF/PWL/PWB Series

Figure A



Dimensions in inches (mm)

Figure B

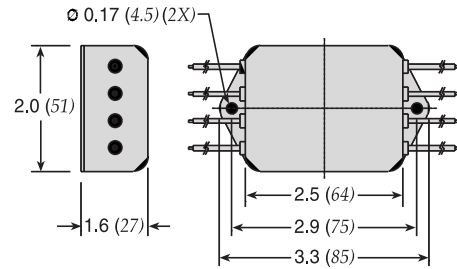
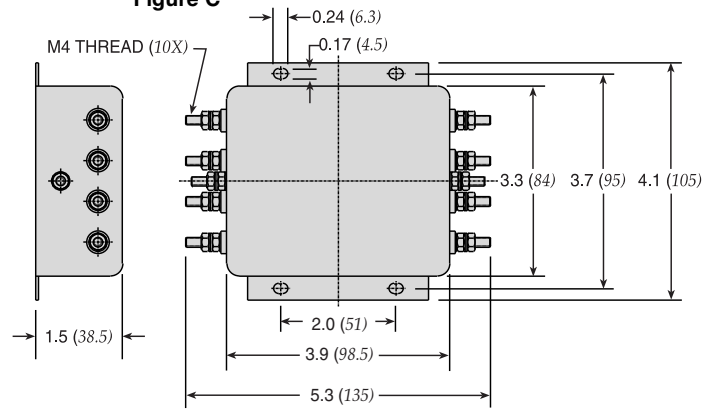


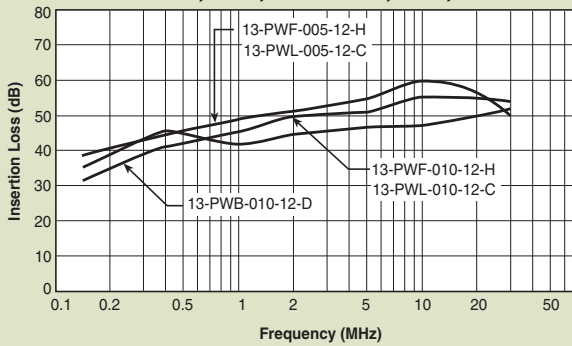
Figure C



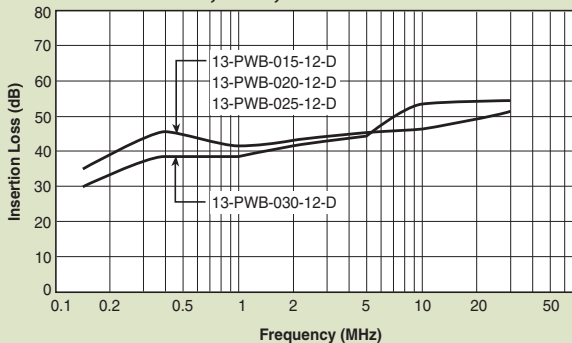
### Common Mode



#### 13-PWF-005;-010;-PWL-005;-010;-PWB-010



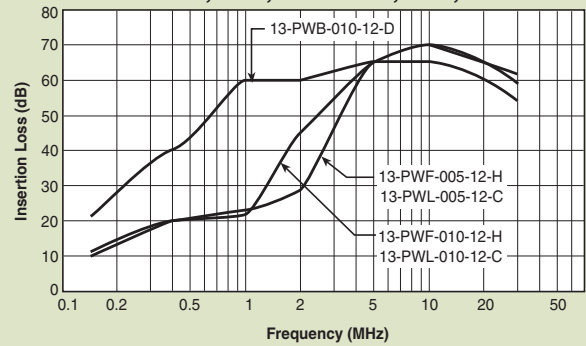
#### 13-PWB-015;-020;-025;-030



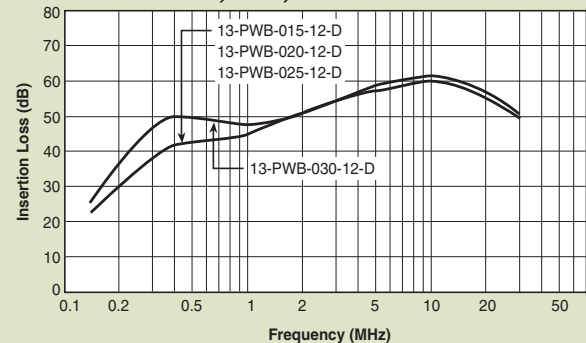
### Normal Mode



#### 13-PWF-005;-010;-PWL-005;-010;-PWB-010



#### 13-PWB-015;-020;-025;-030



# Power Line Filters Three Phase

High Performance

## 13-PDF/PDL/PDB Series

### Features

- Excellent attenuation for high voltage impulse
- Effective for both balanced and unbalanced three-phase loads
- Metal case provides effective EMI shielding
- Epoxy molded for internal component reliability
- Compact and economical
- Excellent filtering characteristics for both normal and common mode
- Operating temperature: -40°C to +85°C
- Designed for 3-phase, 3-Delta connection system

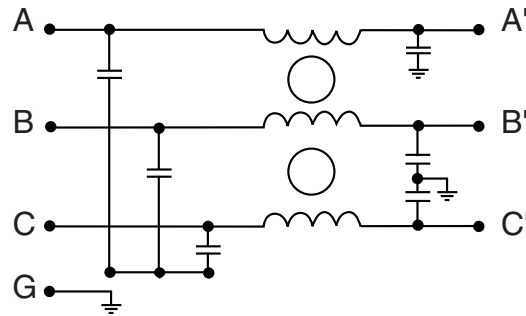
### Applications

- Digital equipment
- Industrial equipment (UPS, inverters and converters)
- Automation equipment
- Switching power supplies

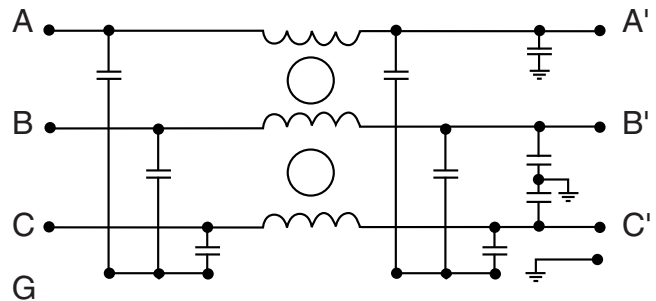


### Circuit Diagram

Circuit 1



Circuit 2



### Specifications

| Model           | Rated Voltage (@ 50/60Hz) | Rated Current | Leakage Current (Max.) | Circuit Diagram | Figure | Temperature Rise (Max.) |
|-----------------|---------------------------|---------------|------------------------|-----------------|--------|-------------------------|
| 13-PDF-005-11-J | 440/250VAC                | 5A            | 1.5mA                  | 1               | A      | 30°C                    |
| 13-PDL-005-11-D |                           |               |                        |                 | B      |                         |
| 13-PDF-010-11-J |                           | 10A           |                        |                 | A      |                         |
| 13-PDL-010-11-D |                           |               |                        |                 | B      |                         |
| 13-PDB-010-11-D |                           | 2             |                        | 15A             | C      |                         |
| 13-PDB-015-11-D |                           |               |                        |                 |        |                         |
| 13-PDB-020-11-D |                           |               |                        |                 |        |                         |
| 13-PDB-025-11-D |                           |               |                        |                 |        |                         |
| 13-PDB-030-11-D |                           |               |                        |                 |        |                         |

Note: Test Voltage 1500VAC one minute, line to ground.  
Insulation Resistance: 300 MΩ min. at 500VDC.  
Voltage Drop: 1V max. at rated current.

# Power Line Filters Three Phase

High Performance

## 13-PDF/PDL/PDB Series

Figure A



Dimensions in inches (mm)

Figure B

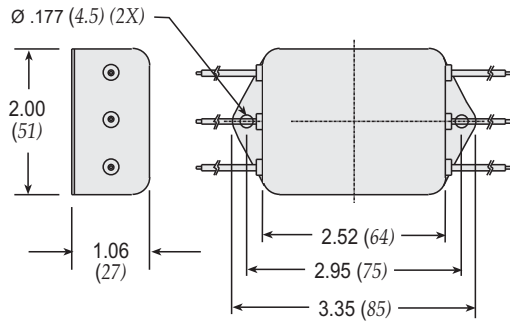
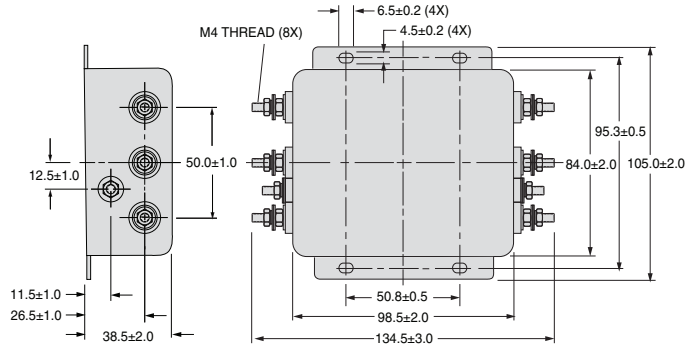


Figure C



### Common Mode



#### 13-PDF-005;-010; PDL-005;-010 PDB-010



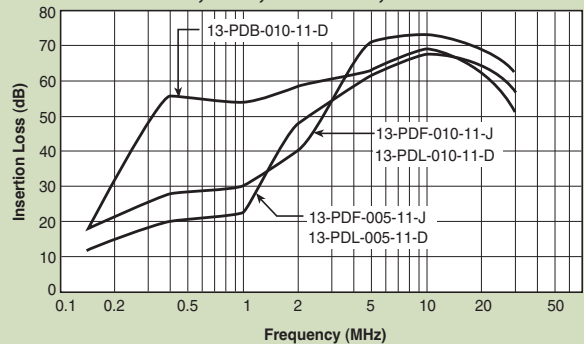
#### 13-PDB-015;-020;-025;-030



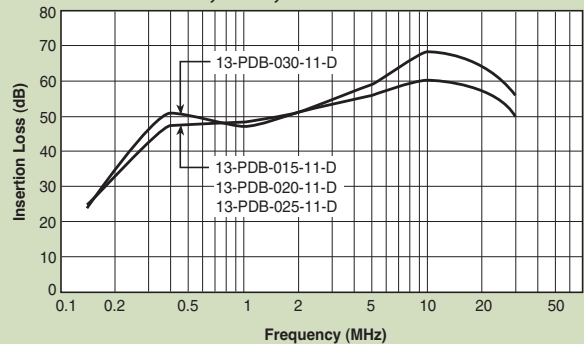
### Normal Mode



#### 13-PDF-005;-010; PDL-005;-010 PDB-010



#### 13-PDB-015;-020;-025;-030



# Power Line Filters Three Phase

High Performance



## 13-PWB Series

### Features

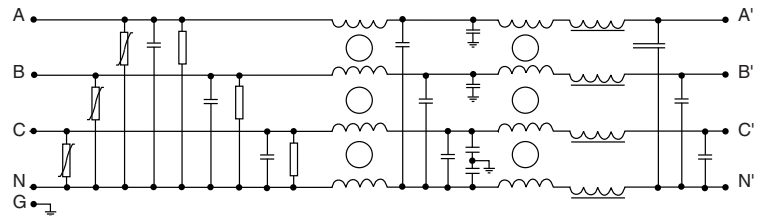
- Excellent attenuation for high voltage impulse
- Metal case provides effective EMI shielding
- Epoxy molded for internal component reliability
- Excellent filtering characteristics for both normal and common mode
- Various current ratings available: from 5 to 150 Amps
- Operating temperature: -40°C to +85°C
- Designed for 3-phase, 4-line power systems

### Applications

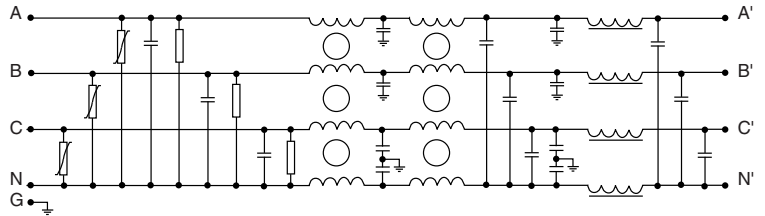
- Power supplies for data systems
- Industrial equipment (UPS, inverters and converters)
- Automation equipment
- Telecommunications systems and equipment

## Circuit Diagram

Circuit 1



Circuit 2



## Specifications

| Model           | Rated Voltage (@ 50/60Hz) | Rated Current | Leakage Current (Max.) | Circuit Diagram | Temperature Rise (Max.) |
|-----------------|---------------------------|---------------|------------------------|-----------------|-------------------------|
| 13-PWB-005-12-A | 480/277VAC                | 5A            | 4.5mA                  | 1               | 30°C                    |
| 13-PWB-010-12-B |                           | 10A           |                        |                 |                         |
| 13-PWB-020-12-B |                           | 20A           |                        |                 |                         |
| 13-PWB-035-12-C |                           | 35A           |                        |                 |                         |
| 13-PWB-050-13-C |                           | 50A           | 9.0mA                  | 2               |                         |
| 13-PWB-080-14-D |                           | 80A           | 20mA                   |                 |                         |
| 13-PWB-100-14-D |                           | 100A          |                        |                 |                         |
| 13-PWB-150-14-E |                           | 150A          |                        |                 |                         |

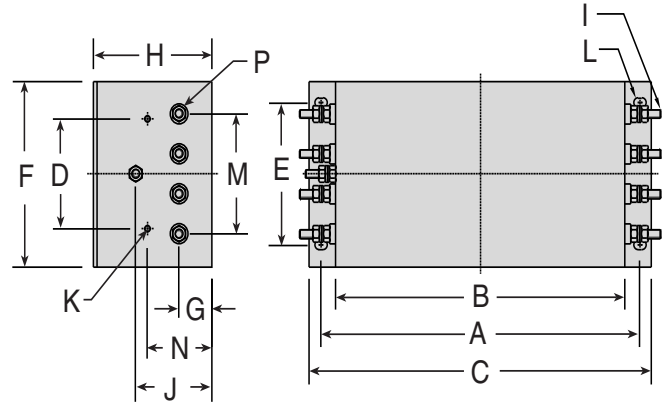
Note: Test Voltage 1500VAC one minute, line to ground.  
Insulation Resistance: 300 MΩ min. at 500VDC.  
Voltage Drop: 1V max. at rated current.



# Power Line Filters Three Phase

High Performance

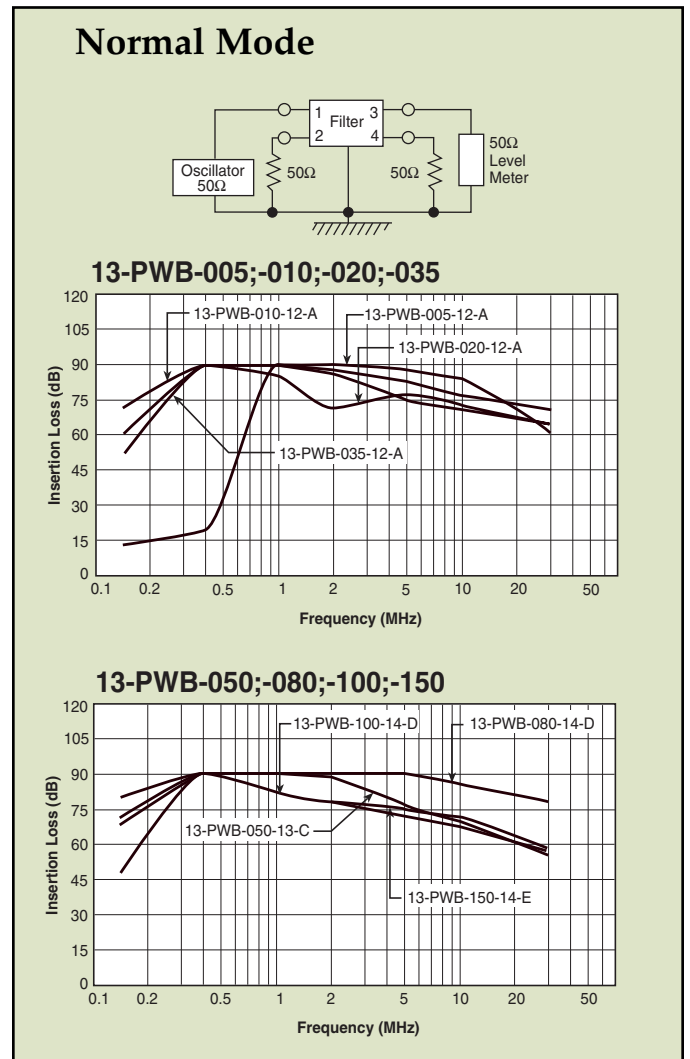
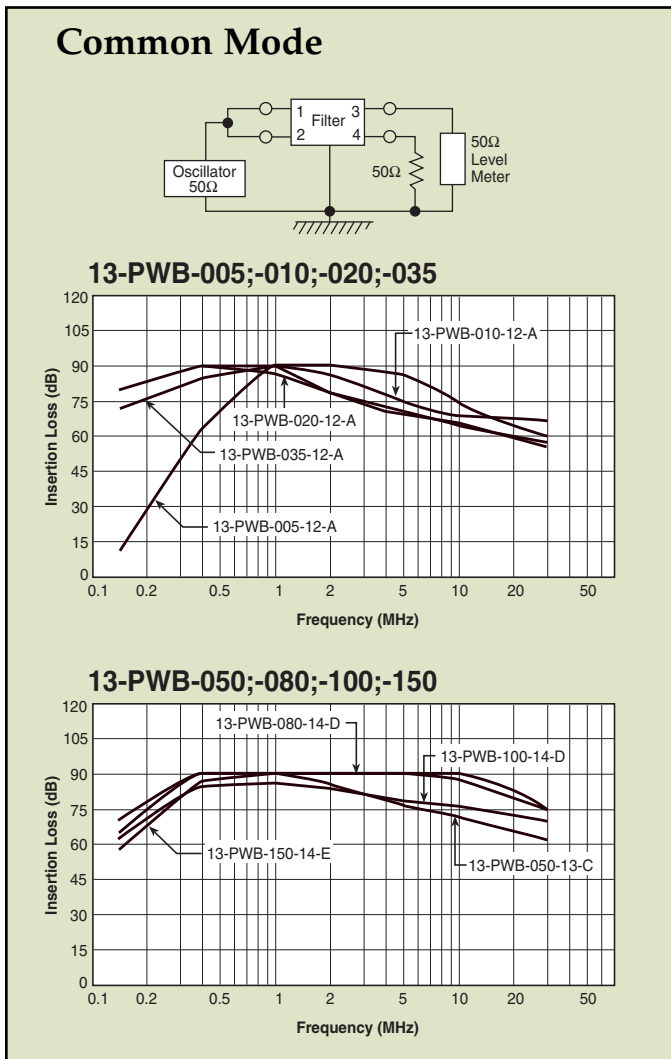
## 13-PWB Series



## Dimensions

Dimensions in inches (mm)

| Model           | A          | B          | C          | D        | E         | F         | G        | H                     | I  | J        | K        | M        | N  | P        | L                      |
|-----------------|------------|------------|------------|----------|-----------|-----------|----------|-----------------------|----|----------|----------|----------|----|----------|------------------------|
| 13-PWB-005-12-A | 7.2 (184)  | 6.3 (160)  | 7.9 (202)  | 2.4 (60) | 1.7 (44)  | 3.5 (86)  | .70 (18) | 2.3 (58)              | M4 | 1.5 (38) | -        | -        | -  | M4       | .25 x .37 (6.4 x 9.4)  |
| 13-PWB-010-12-B | 9.6 (243)  | 8.7 (220)  | 10.3 (261) |          |           | 3.9 (100) |          |                       |    | .98 (25) |          |          |    |          | 3.5 (90)               |
| 13-PWB-020-12-B |            |            |            | 2.3 (58) | 2.9 (74)  | 1.9 (49)  | M6       | .25 x .38 (6.4 x 9.6) |    |          |          |          |    |          |                        |
| 13-PWB-035-12-C |            |            |            | 2.4 (62) | 3.4 (86)  | 2.2 (56)  | M8       | .25 x .38 (6.4 x 9.7) |    |          |          |          |    |          |                        |
| 13-PWB-050-13-C | 13.9 (354) | 12.6 (320) | 15.1 (384) | 3.9 (99) | 6.1 (155) | 7.3 (185) | 1.2 (30) | M8                    | M4 | 2.4 (62) | 3.4 (86) | 2.2 (56) | M8 | 2.4 (61) | .25 x .39 (6.4 x 9.9)  |
| 13-PWB-080-14-D |            |            |            |          |           |           |          |                       |    |          |          |          |    |          | .25 x .36 (6.4 x 9.10) |
| 13-PWB-100-14-D |            |            |            |          |           |           |          |                       |    |          |          |          |    |          | .25 x .36 (6.4 x 9.10) |
| 13-PWB-150-14-E |            |            |            |          |           |           |          |                       |    |          |          |          |    |          | .25 x .36 (6.4 x 9.11) |



# Power Line Filters Three Phase

High Performance



## 13-PDB Series

### Features

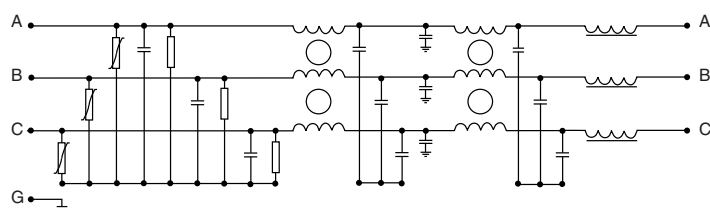
- Excellent attenuation for high voltage impulse
- Metal case provides effective EMI shielding
- Epoxy molded for internal component reliability
- Excellent filtering characteristics for both normal and common mode
- Various current ratings available: from 5 to 200 Amps
- Operating temperature: -40°C to +85°C
- Designed for 3-phase, 3-line connection systems

### Applications

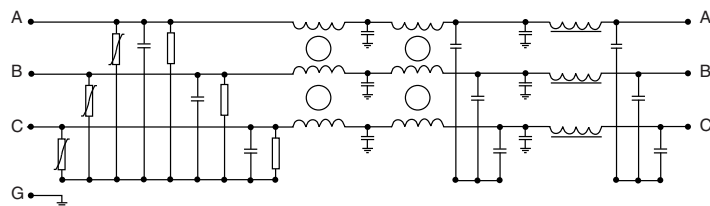
- Digital equipment
- Industrial equipment (UPS, inverters and converters)

## Circuit Diagram

Circuit 1



Circuit 2



## Specifications

| Model           | Rated Voltage (@ 50/60Hz) | Rated Current | Leakage Current (Max.) | Circuit Diagram | Temperature Rise (Max.) |      |   |
|-----------------|---------------------------|---------------|------------------------|-----------------|-------------------------|------|---|
| 13-PDB-005-12-A | 480/277VAC                | 5A            | 4.5mA                  | 1               | 30°C                    |      |   |
| 13-PDB-010-12-A |                           | 10A           |                        |                 |                         |      |   |
| 13-PDB-020-12-B |                           | 20A           |                        |                 |                         |      |   |
| 13-PDB-035-12-B |                           | 35A           |                        |                 |                         |      |   |
| 13-PDB-050-12-B |                           | 50A           |                        |                 |                         |      |   |
| 13-PDB-080-13-C |                           | 80A           | 9.0mA                  | 1               |                         |      |   |
| 13-PDB-100-14-C |                           | 100A          |                        |                 |                         |      |   |
| 13-PDB-150-14-C |                           | 150A          |                        |                 |                         |      |   |
| 13-PDB-200-14-D |                           | 100A          |                        |                 |                         | 20mA | 2 |
|                 |                           | 200A          |                        |                 |                         |      |   |

Note: Test Voltage 2250VDC one minute, line to ground.  
Insulation Resistance: 500MΩ.

# Power Line Filters Three Phase

High Performance

## 13-PDB Series

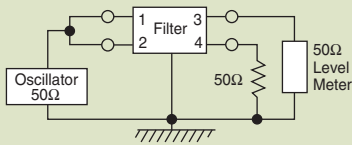


## Dimensions

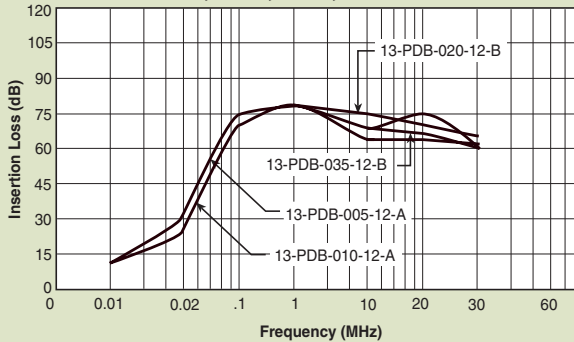
Dimensions in inches (mm)

| Model           | A             | B             | C             | D           | E            | F            | G           | H            | I  | J           | K  | M           | N           | P  | L                      |                       |  |  |  |  |  |                        |
|-----------------|---------------|---------------|---------------|-------------|--------------|--------------|-------------|--------------|----|-------------|----|-------------|-------------|----|------------------------|-----------------------|--|--|--|--|--|------------------------|
| 13-PDB-005-12-A | 7.2<br>(184)  | 6.3<br>(160)  | 7.9<br>(202)  | 1.6<br>(42) | 2.4<br>(60)  | 3.3<br>(86)  | .70<br>(18) | 2.3<br>(58)  | M4 | 1.5<br>(38) | -  | -           | -           | M4 | .25 x .37 (6.4 x 9.4)  |                       |  |  |  |  |  |                        |
| 13-PDB-010-12-A |               |               |               |             |              |              |             |              |    |             |    |             |             |    | .25 x .37 (6.4 x 9.5)  |                       |  |  |  |  |  |                        |
| 13-PDB-020-12-B |               |               |               |             |              |              |             |              |    |             |    |             |             |    | .25 x .38 (6.4 x 9.6)  |                       |  |  |  |  |  |                        |
| 13-PDB-035-12-B | 9.6<br>(243)  | 8.7<br>(220)  | 10.3<br>(261) | 2.3<br>(58) | 2.7<br>(70)  | 3.9<br>(100) | .98<br>(25) | 3.5<br>(90)  | M6 | 2.3<br>(58) |    | 2.9<br>(74) | 1.9<br>(49) | M6 | .25 x .38 (6.4 x 9.7)  |                       |  |  |  |  |  |                        |
| 13-PDB-050-12-B |               |               |               |             |              |              |             |              |    |             |    |             |             |    |                        | .25 x .38 (6.4 x 9.8) |  |  |  |  |  |                        |
| 13-PDB-080-13-C |               |               |               |             |              |              |             |              |    |             |    |             |             |    |                        | .25 x .39 (6.4 x 9.9) |  |  |  |  |  |                        |
| 13-PDB-100-14-C | 13.9<br>(354) | 12.6<br>(320) | 15.1<br>(384) | 2.5<br>(66) | 6.1<br>(155) | 7.3<br>(185) | 1.2<br>(30) | 3.9<br>(100) | M8 | 2.4<br>(62) | M4 | 3.3<br>(86) | 2.2<br>(56) | M8 | .25 x .36 (6.4 x 9.10) |                       |  |  |  |  |  |                        |
| 13-PDB-150-14-C |               |               |               |             |              |              |             |              |    |             |    |             |             |    |                        |                       |  |  |  |  |  | .25 x .36 (6.4 x 9.11) |
| 13-PDB-200-14-D |               |               |               |             | 7.5<br>(190) | 8.6<br>(220) | 1.4<br>(35) |              |    |             |    |             |             |    |                        |                       |  |  |  |  |  |                        |

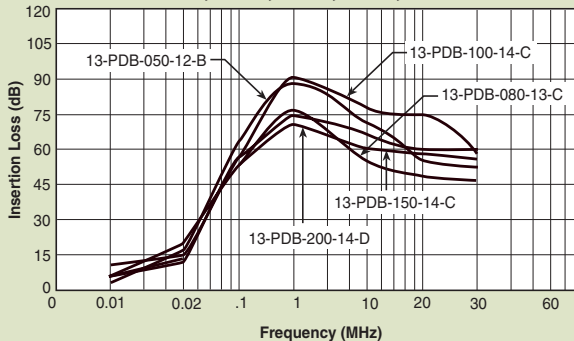
### Common Mode



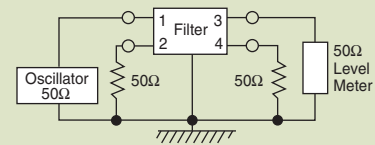
#### 13-PDB-005;-010;-020;-035



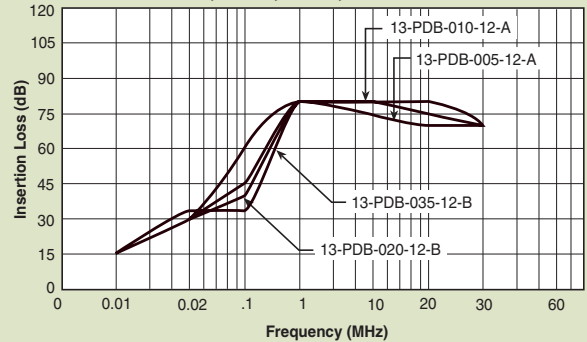
#### 13-PDB-050;-080;-100;-150;-200



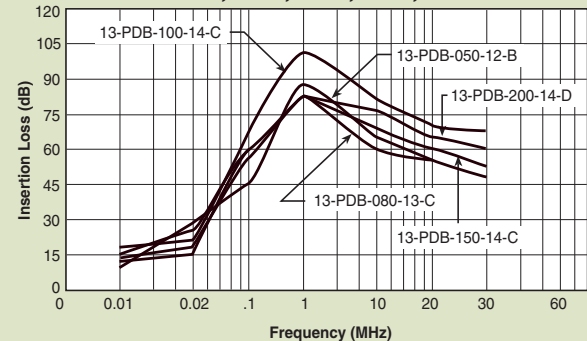
### Normal Mode



#### 13-PDB-005;-010;-020;-035



#### 13-PDB-050;-080;-100;-150;-200



Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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