

# EEA, EEB Series



**UL Recognized  
CSA Certified  
VDE Approved**



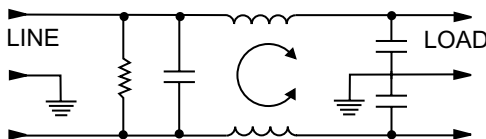
## EEA Series

This is a new generation of compact RFI filters with IEC socket. A totally new design in both the internal structure and manufacturing process makes this series cost effective and compact. The EEA series supersedes the EF series by providing superior performance, particularly in the common mode at low frequencies. Mechanically, its slimmer size makes it compatible with all similar filters on the market.

## EEB Series

This is a new generation of compact RFI filters with IEC socket. A totally new design in both the internal structure and manufacturing process makes this series cost effective and compact. Electrically, the EEB provides enhanced differential mode performance compared to both the EEA and EF series. Mechanically, its slimmer size makes it compatible with all similar filters on the market.

## Electrical Schematic



Resistor location for reference only.

## Specifications

### Maximum leakage current, each line-to-ground

|                  |        |
|------------------|--------|
| @ 120 VAC 60 Hz: | .22 mA |
| @ 250 VAC 50 Hz: | .38 mA |

### Hipot rating (one minute):

|                |          |
|----------------|----------|
| line-to-ground | 2250 VDC |
| line-to-line   | 1450 VDC |

### Operating frequency:

50/60 Hz

### Rated voltage (max.):

250 VAC

### Minimum insertion loss in dB:

**EEA:** Line-to-ground in 50 ohm circuit

| Current<br>Rating | Frequency-MHz |     |    |     |    |    |    |    |    |
|-------------------|---------------|-----|----|-----|----|----|----|----|----|
|                   | .01           | .05 | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 1A                | 12            | 23  | 29 | 32  | 41 | 47 | 47 | 47 | 40 |
| 3A                | -             | 10  | 15 | 19  | 30 | 36 | 48 | 50 | 47 |
| 6A                | -             | 1   | 4  | 10  | 22 | 28 | 42 | 48 | 47 |
| 10A               | -             | 1   | 3  | 5   | 14 | 20 | 32 | 38 | 47 |

Line-to-line in 50 ohm circuit

| Current<br>Rating | Frequency-MHz |   |     |    |    |    |    |
|-------------------|---------------|---|-----|----|----|----|----|
|                   | .5            | 1 | 1.5 | 3  | 5  | 10 | 30 |
| 1A                | 1             | 9 | 19  | 32 | 42 | 45 | 40 |
| 3A                | 2             | 4 | 6   | 20 | 35 | 45 | 40 |
| 6A                | 2             | 4 | 6   | 6  | 24 | 40 | 40 |
| 10A               | 1             | 4 | 5   | 5  | 5  | 30 | 40 |

**EEB:** Line-to-ground in 50 ohm circuit

| Current<br>Rating | Frequency-MHz |     |    |     |    |    |    |    |    |
|-------------------|---------------|-----|----|-----|----|----|----|----|----|
|                   | .01           | .05 | .1 | .15 | .5 | 1  | 5  | 10 | 30 |
| 1A                | 12            | 23  | 29 | 32  | 41 | 47 | 47 | 47 | 40 |
| 3A                | -             | 10  | 14 | 18  | 30 | 36 | 48 | 50 | 47 |
| 6A                | -             | 1   | 4  | 10  | 22 | 28 | 42 | 48 | 47 |
| 10A               | -             | 1   | 3  | 5   | 14 | 20 | 32 | 38 | 47 |

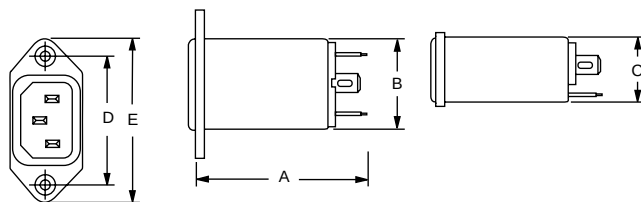
Line-to-line in 50 ohm circuit

| Current<br>Rating | Frequency-MHz |     |    |    |    |    |    |    |
|-------------------|---------------|-----|----|----|----|----|----|----|
|                   | .01           | .15 | .5 | 1  | 3  | 5  | 10 | 30 |
| 1A                | 1             | 3   | 14 | 23 | 41 | 47 | 50 | 44 |
| 3A                | 1             | 2   | 11 | 14 | 25 | 38 | 44 | 40 |
| 6A                | 1             | 2   | 10 | 14 | 20 | 33 | 42 | 40 |
| 10A               | 1             | 2   | 10 | 16 | 19 | 19 | 39 | 40 |

# EEA, EEB Series

## Case Styles

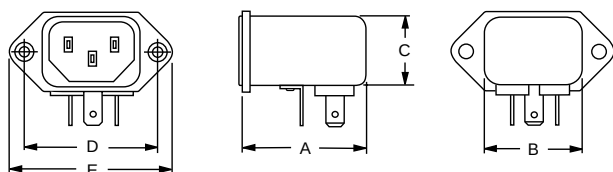
### EEA1/EEB1 (front or back mounting)



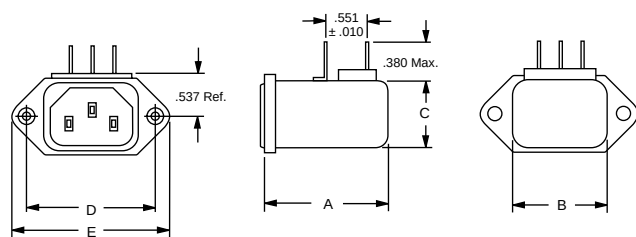
Typical dimensions:

Terminals: .250 [6.35] (3) Holes: .07 [1.8] Dia.(2) Slot: .07 x .16 [1.8 x 3.8] (1)

### EEA2/EEB2 (back mount only)



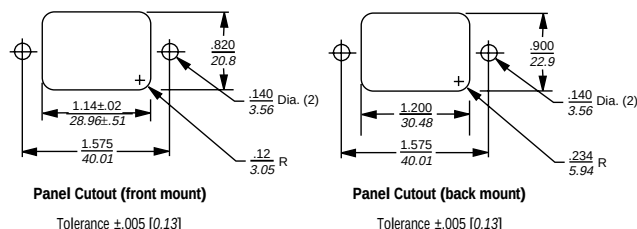
### EEAP/EEBP (back mount only)



Typical dimensions:

Mounting holes: .132 [3.35] Dia. (2) with .260 Dia. x 90° countersunk for #4 Flathead Screw.

## Recommended Panel Cutouts



## Case Dimensions

| Part No. | A<br>(max)   | B<br>(max)   | C<br>(max)   | D<br>$\pm .010$<br>$\pm .25$ | E<br>(max)   |
|----------|--------------|--------------|--------------|------------------------------|--------------|
| EEA1     | 2.15<br>54.6 | 1.12<br>28.4 | 0.81<br>20.6 | 1.575<br>40.01               | 1.98<br>50.3 |
| EEA2     | 1.54<br>39.1 | 1.12<br>28.4 | 0.81<br>20.6 | 1.575<br>40.01               | 1.98<br>50.3 |
| EEAP     | 1.54<br>39.1 | 1.12<br>28.4 | 0.81<br>20.6 | 1.575<br>40.01               | 1.98<br>50.3 |
| EEB1     | 2.15<br>54.6 | 1.12<br>28.4 | 0.81<br>20.6 | 1.575<br>40.01               | 1.98<br>50.3 |
| EEB2     | 1.54<br>39.1 | 1.12<br>28.4 | 0.81<br>20.6 | 1.575<br>40.01               | 1.98<br>50.3 |
| EEBP     | 1.54<br>39.1 | 1.12<br>28.4 | 0.81<br>20.6 | 1.575<br>40.01               | 1.98<br>50.3 |

## Part Numbers

|                     |        |
|---------------------|--------|
| 1EEA1               | 1EEB1  |
| 1EEA2               | 1EEB2  |
| 1EEAP               | 1EEBP  |
| 3EEA1               | 3EEB1  |
| 3EEA2               | 3EEB2  |
| 3EEAP               | 3EEBP  |
| 6EEA1               | 6EEB1  |
| 6EEA2               | 6EEB2  |
| 6EEAP               | 6EEBP  |
| 10EEA1              | 10EEB1 |
| 10EEA2              | 10EEB2 |
| 10EEAP              | 10EEBP |
| Line Cord No.       | GA400  |
| Insulating Boot No. | FA601  |

## EEAP/EEBP Model PCB Layout

