

**Electronics** 

#### Cost Effective Compact RFI Filter IEC Connector Package

# EEA, EEB Series



UL Recognized CSA Certified VDE Approved







EEA2/EEB2

EEAP/EEBP

### **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:

Line-to-ground in 50 ohm circuit

| Current |      |     | Fr | eque | ncy-N | ИHz |    |    |    |
|---------|------|-----|----|------|-------|-----|----|----|----|
| Rating  | .01  | .05 | .1 | .15  | .5    | 1   | 5  | 10 | 30 |
| EEA Mod | lels |     |    |      |       |     |    |    |    |
| 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 |
| EEB Mod | lels |     |    |      |       |     |    |    |    |
| 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           |                    | F | reque | ncy-M | lHz |    |    |
|-------------------|--------------------|---|-------|-------|-----|----|----|
| Rating            | .5 1 1.5 3 5 10 30 |   |       |       |     |    |    |
| <b>EEA Models</b> |                    |   |       |       |     |    |    |
| 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 |

| Current |      | Frequency-MHz |    |    |    |    |    |    |
|---------|------|---------------|----|----|----|----|----|----|
| Rating  | .01  | .15           | .5 | 1  | 3  | 5  | 10 | 30 |
| EEB Mod | lels |               |    |    |    |    |    |    |
| 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 |

USA Cust. Svc.: 1-800-468-2023 CORCOM Prods: 1-847-680-7400 Germany: 49-89-6089-0 www.corcom.com www.tycoelectronics.com

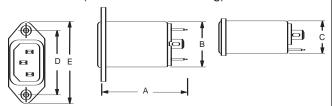


**Electronics** 

# Cost Effective Compact RFI Filter IEC Connector Package (Continued)

# **EEA**, **EEB** Series

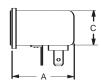
# **Case Styles EEA1/EEB1** (front or back mounting)



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

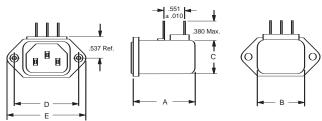
# EEA2/EEB2 (back mount only)







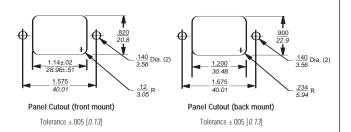
### **EEAP/EEBP** (back mount only)



Typical dimensions:

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

### **Recommended Panel Cutouts**



## **Case Dimensions**

|          | Α     | В     | С     | D               | Е     |
|----------|-------|-------|-------|-----------------|-------|
| Part No. | (max) | (max) | (max) | ± .010<br>± .25 | (max) |
| EEA1     | 2.15  | 1.12  | 0.81  | 1.575           | 1.98  |
|          | 54.6  | 28.4  | 20.6  | 40.01           | 50.3  |
| EEA2     | 1.54  | 1.12  | 0.81  | 1.575           | 1.98  |
|          | 39.1  | 28.4  | 20.6  | 40.01           | 50.3  |
| EEAP     | 1.54  | 1.12  | 0.81  | 1.575           | 1.98  |
|          | 39.1  | 28.4  | 20.6  | 40.01           | 50.3  |
| EEB1     | 2.15  | 1.12  | 0.81  | 1.575           | 1.98  |
| LLD!     | 54.6  | 28.4  | 20.6  | 40.01           | 50.3  |
| EEB2     | 1.54  | 1.12  | 0.81  | 1.575           | 1.98  |
|          | 39.1  | 28.4  | 20.6  | 40.01           | 50.3  |
| EEBP     | 1.54  | 1.12  | 0.81  | 1.575           | 1.98  |
|          | 39.1  | 28.4  | 20.6  | 40.01           | 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**

