

# PREO Power Line EMI Filters

A Division of Eastek International Corporation

## Series EB

Smallest Package  
Lowest Cost



UL Recognized  
CSA Certified  
VDE Approved

### Introduction

The EB series are general purpose EMI filters, which suppress high frequency conducted noise both into and out of the equipment through the power lines. The compact and low cost designs make the EB series a good choice for cleaning up noisy power lines. Available in a wide range of current ratings and termination styles.

### Minimum Insertion Loss in dB

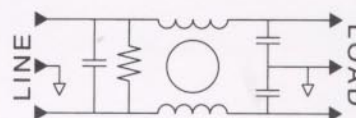
Common mode (line to ground) in 50 ohm system:

| MODEL        | Frequency in MHz |      |      |      |      |     |     |    |    |
|--------------|------------------|------|------|------|------|-----|-----|----|----|
|              | 0.02             | 0.05 | 0.10 | 0.15 | 0.50 | 1.0 | 5.0 | 10 | 30 |
| 01EBM1       | 15               | 22   | 28   | 32   | 45   | 45  | 43  | 43 | 40 |
| 02EB11/33    | 7                | 15   | 21   | 24   | 35   | 43  | 45  | 45 | 40 |
| 03EB11/33/M1 | 4                | 10   | 15   | 20   | 30   | 38  | 48  | 48 | 44 |
| 06EB11/33/M1 |                  | 2    | 5    | 9    | 20   | 28  | 42  | 50 | 47 |
| 10EB11/33/66 |                  | 2    | 5    | 9    | 20   | 25  | 38  | 42 | 40 |
| 10EBM1       |                  |      | 2    | 3    | 13   | 20  | 35  | 40 | 45 |
| 20EB11/66    |                  | 3    | 7    | 10   | 20   | 28  | 35  | 38 | 40 |
| 30EB66       |                  | 4    | 8    | 13   | 23   | 30  | 35  | 38 | 40 |

Differential mode (line to line) in 50 ohm system:

| MODEL        | Frequency in MHz |      |      |     |     |     |    |    |
|--------------|------------------|------|------|-----|-----|-----|----|----|
|              | 0.10             | 0.15 | 0.50 | 1.0 | 3.0 | 5.0 | 10 | 30 |
| 01EBM1       | 2                | 5    | 14   | 23  | 42  | 47  | 50 | 45 |
| 02EB11/33    | 2                | 5    | 13   | 16  | 35  | 45  | 50 | 45 |
| 03EB11/33/M1 | 2                | 5    | 12   | 14  | 24  | 38  | 44 | 42 |
| 06EB11/33/M1 | 2                | 5    | 12   | 14  | 18  | 33  | 42 | 42 |
| 10EB11/33/66 | 2                | 5    | 12   | 14  | 18  | 33  | 42 | 42 |
| 10EBM1       | 2                | 5    | 12   | 16  | 18  | 20  | 28 | 40 |
| 20EB11/66    | 2                | 5    | 12   | 15  | 18  | 30  | 40 | 40 |
| 30EB66       | 2                | 5    | 12   | 15  | 18  | 30  | 40 | 40 |

### Schematic



### Electrical ratings

Maximum operating voltage: 250 VAC

Operating frequency: 50/60 Hz

Hipot rating (one minute):

Line to Ground: 1500 VAC

Line to Line: 1450 VDC

Maximum leakage current (each line to ground):

@ 120 VAC / 60 Hz: 0.25 mA

@ 250 VAC / 50 Hz: 0.45 mA

Rated current at 40°C ambient temperature:

01EBM1 1 A

02EB11, 02EB33 2 A

03EB11, 03EB33, 03EBM1 3 A

06EB11, 06EB33, 06EBM1 6 A

10EB11, 10EB33, 10EB66, 10EBM1 10 A

20EB11, 20EB66 20 A

30EB66 30 A

Now in Stock at

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