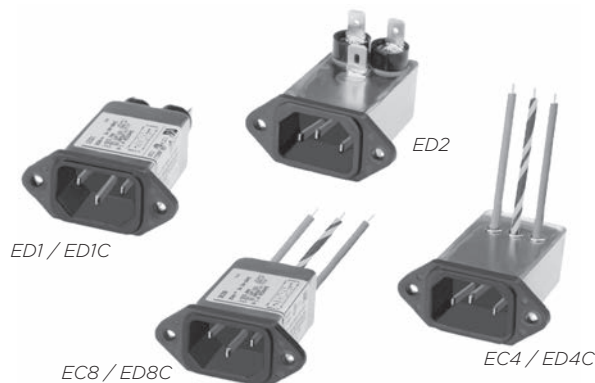


Medium Performance Compact EMI Power Inlet Filter

ED Series



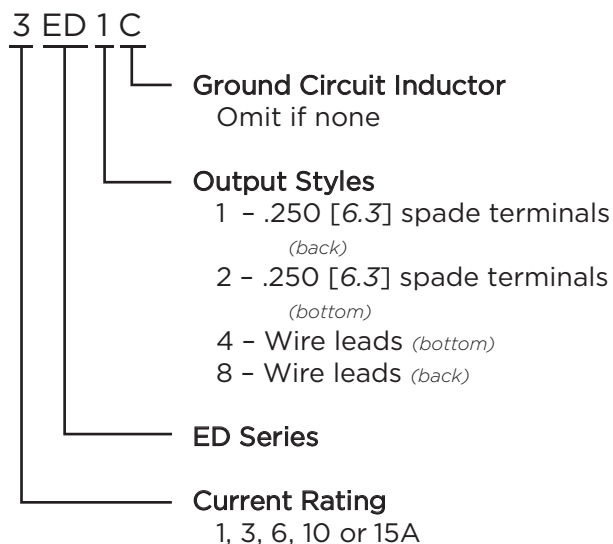
UL Recognized
CSA Certified
VDE Approved*



ED Series

- Two element circuit provides medium attenuation
- Available with an internal ground-circuit inductor (C versions) to isolate equipment chassis from power line ground at radio frequencies
- Versions up to 15A*
- Similar to EEJ Series with alternative termination options
- See the EC Series for better differential mode performance

Ordering Information



*15A versions are tested by Underwriters Laboratories to US and Canadian requirements and are VDE approved at 10A, 250VAC

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

Rated Voltage (max.): 250 VAC

Operating Frequency: 50/60 Hz

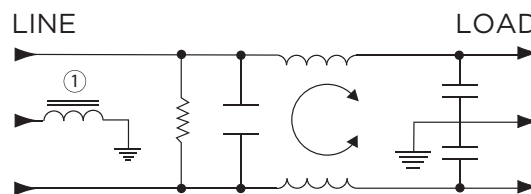
Rated Current: 1 to 15A*

Operating Ambient Temperature Range (at rated current I_r): -10°C to +40°C
 In an ambient temperature (T_a) higher than +40°C the maximum operating current (I_O) is calculated as follows: $I_O = I_r \sqrt{(85 - T_a) / 45}$

Available Part Numbers

| | | | |
|----------------------------------|------|-------|-------|
| 1ED1 | 1ED2 | 1ED4 | 1ED8 |
| 3ED1 | 3ED2 | 3ED4 | 3ED8 |
| 6ED1 | 6ED2 | 6ED4 | 6ED8 |
| 10ED1 | | | |
| 15ED1 | | | 15ED8 |
| Ground Circuit Inductor Versions | | | |
| 6ED1C | | 6ED4C | 6ED8C |
| 10ED1C | | | |

Electrical Schematic



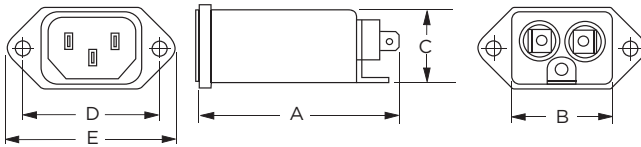
Note 1: C versions only

Medium Performance Compact EMI Power Inlet Filter (continued)

ED Series

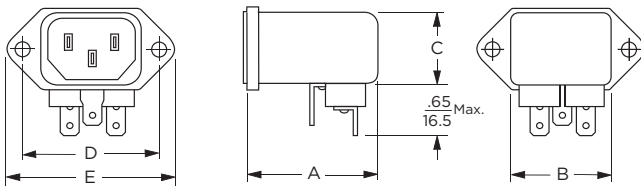
Case Styles

ED1 & ED1C



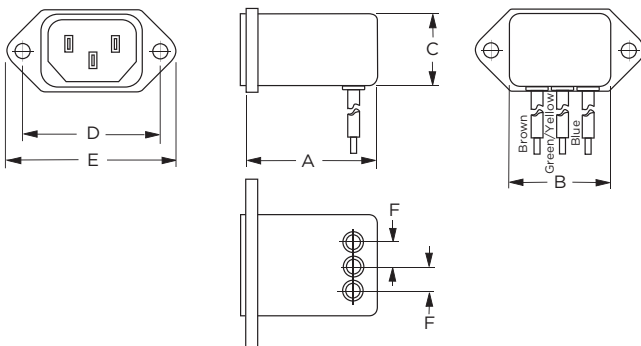
Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

ED2



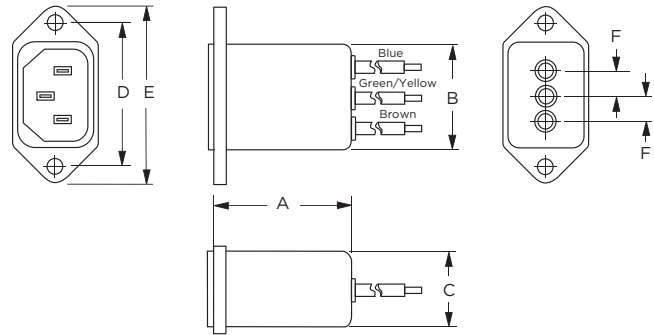
Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

ED4 & ED4C



Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

ED8 & ED8C



Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

Case Dimensions

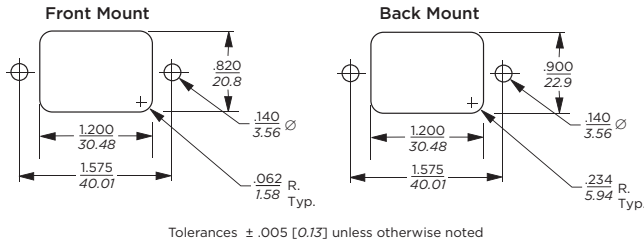
| Part No. | A (max.) | B (max.) | C (max.) | D $\pm .015$ $\pm .38$ | E (max.) | F (ref.) |
|------------------|-------------|-------------|-------------|------------------------------|-------------|-------------|
| 1ED1, 3ED1, 6ED1 | 2.21 | 1.19 | 0.81 | 1.575 | 1.98 | - |
| 1ED2, 3ED2, 6ED2 | 1.55 | 1.19 | 0.85 | 1.575 | 1.98 | - |
| 1ED4, 3ED4, 6ED4 | 1.55 | 1.19 | 0.85 | 1.575 | 1.98 | .295 |
| 1ED8, 3ED8, 6ED8 | 1.55 | 1.19 | 0.81 | 1.575 | 1.98 | .295 |
| 6ED1C | 2.62 | 1.19 | 0.81 | 1.575 | 1.98 | - |
| 6ED4C | 1.98 | 1.19 | 0.85 | 1.575 | 1.98 | .295 |
| 6ED8C | 1.98 | 1.19 | 0.81 | 1.575 | 1.98 | .295 |
| 10ED1 /1C, 15ED1 | 2.62 | 1.19 | 0.81 | 1.575 | 1.98 | - |
| 15ED8 | 1.98 | 1.19 | 0.81 | 1.575 | 1.98 | - |



Medium Performance Compact EMI Power Inlet Filter *(continued)*

ED Series

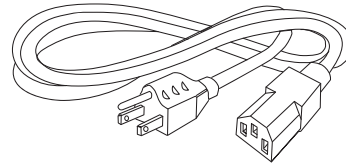
Recommended Panel Cutouts



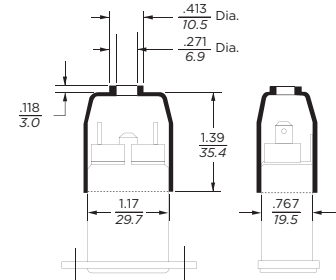
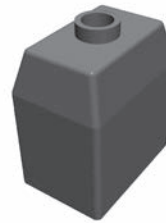
Note 1: ED1 and ED8 allow for front or back mounting
Note 2: ED2 and ED4 allow for back mounting only

Accessories

GA400: NEMA 5-15P to IEC 60320-1 C-13 line cord



FA601: Insulating Shroud

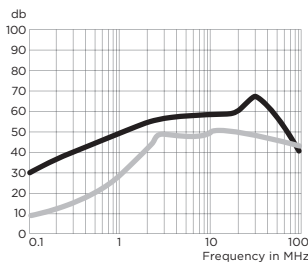


Performance Data

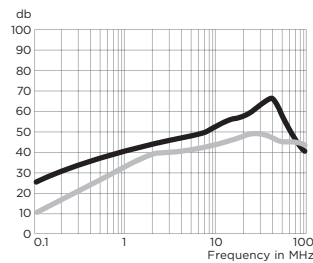
Typical Insertion Loss

Measured in closed 50 Ohm system

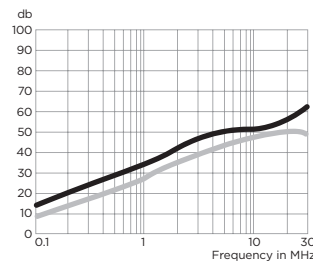
1ED



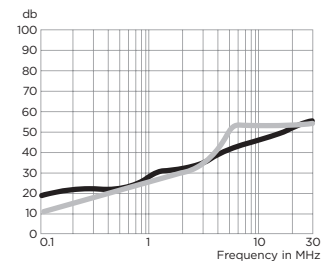
3ED



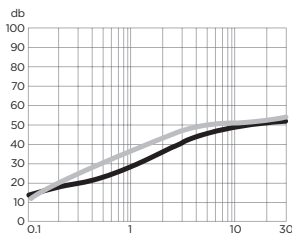
6ED



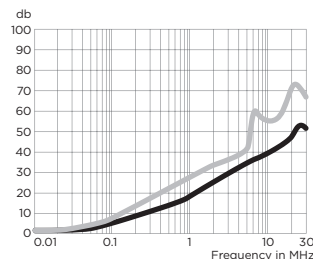
6ED1C



10ED1 & 10ED1C



15ED



— Common Mode / Asymmetrical (L-G)
— Differential Mode / Symmetrical (L-L)

Medium Performance Compact EMI Power Inlet Filter *(continued)*

ED Series

Performance Data *(continued)*

Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

| Current Rating | Frequency – MHz | | | | | |
|--------------------------------|-----------------|----|----|----|----|----|
| | .15 | .5 | 1 | 5 | 10 | 30 |
| ED1, ED2, ED4 & ED8 | | | | | | |
| 1A | 24 | 35 | 42 | 49 | 52 | 54 |
| 3A | 20 | 29 | 36 | 45 | 50 | 54 |
| 6A | 14 | 23 | 30 | 41 | 45 | 50 |
| 10A | 8 | 14 | 20 | 35 | 39 | 45 |
| 15A | 4 | 9 | 12 | 28 | 34 | 40 |
| ED1C | | | | | | |
| 6A | 14 | 20 | 25 | 37 | 42 | 50 |
| 10A | 8 | 14 | 20 | 35 | 39 | 45 |
| ED4C & ED8C | | | | | | |
| 6A | 14 | 20 | 25 | 37 | 42 | 50 |

Differential Mode / Symmetrical (Line to Line)

| Current Rating | Frequency – MHz | | | | | |
|--------------------------------|-----------------|----|----|----|----|----|
| | .15 | .5 | 1 | 5 | 10 | 30 |
| ED1, ED2, ED4 & ED8 | | | | | | |
| 1A | 3 | 15 | 20 | 37 | 37 | 36 |
| 3A | 3 | 15 | 20 | 37 | 37 | 36 |
| 6A | 3 | 15 | 20 | 31 | 35 | 34 |
| 10A | 6 | 15 | 20 | 23 | 44 | 47 |
| 15A | 6 | 18 | 23 | 33 | 44 | 47 |
| ED1C | | | | | | |
| 6A | 7 | 17 | 23 | 36 | 42 | 42 |
| 10A | 6 | 15 | 20 | 23 | 44 | 47 |
| ED4C & ED8C | | | | | | |
| 6A | 7 | 17 | 23 | 29 | 38 | 42 |

