

Medium Performance Compact EMI Power Inlet Filter

ED Series



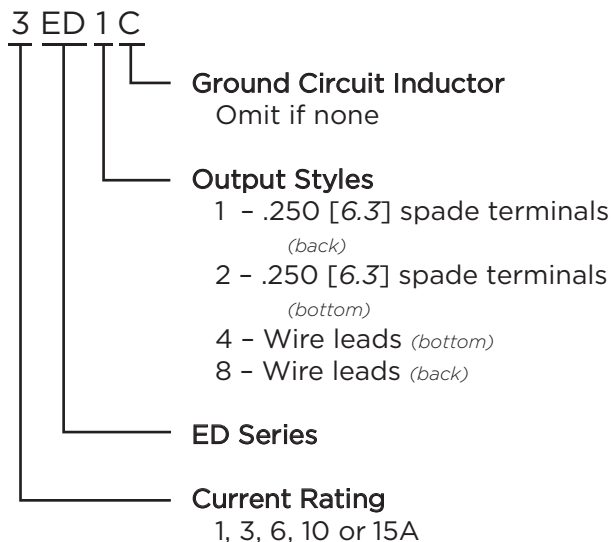
UL Recognized
CSA Certified
VDE Approved*



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*

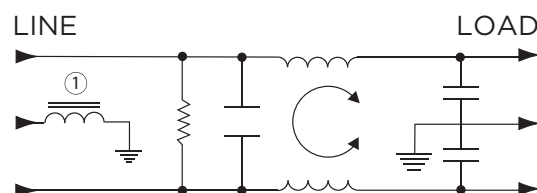
Operating Ambient Temperature Range

(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



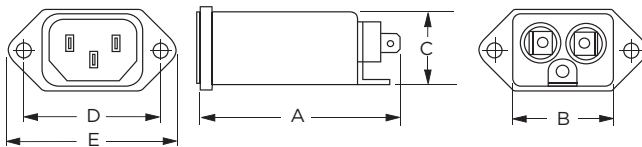
Note 1: C versions only

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

ED Series

Case Styles

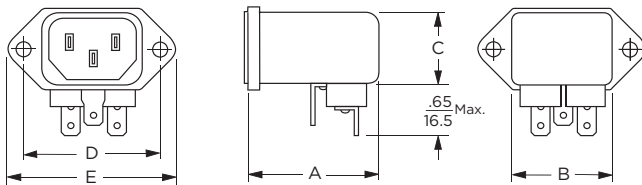
ED1 & ED1C



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

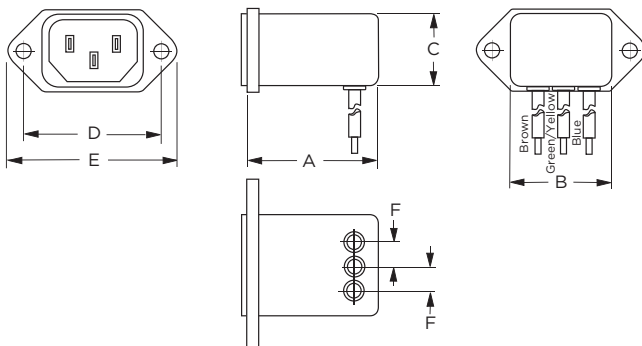
ED2



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

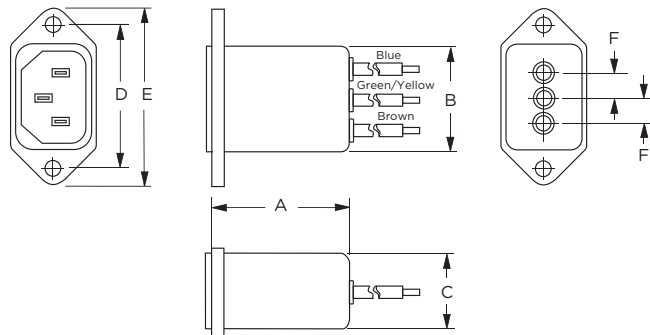
ED4 & ED4C



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

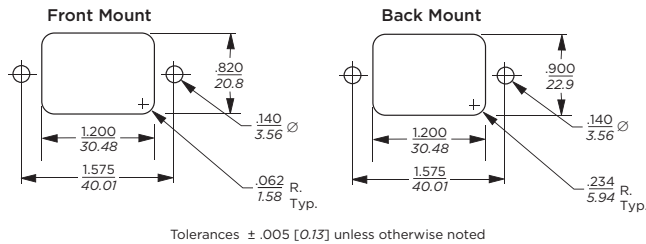
Case Dimensions

Part No.	A (max.)	B (max.)	C (max.)	D ±.015 ±.38	E (max.)	F (ref.)
1ED1, 3ED1, 6ED1	2.21 56.0	1.19 30.2	0.81 20.6	1.575 40.01	1.98 50.3	-
1ED2, 3ED2, 6ED2	1.55 39.4	1.19 30.2	0.85 21.6	1.575 40.01	1.98 50.3	-
1ED4, 3ED4, 6ED4	1.55 39.4	1.19 30.2	0.85 21.6	1.575 40.01	1.98 50.3	.295 7.5
1ED8, 3ED8, 6ED8	1.55 39.4	1.19 30.2	0.81 20.06	1.575 40.01	1.98 50.3	.295 7.5
6ED1C	2.62 66.5	1.19 30.2	0.81 20.6	1.575 40.01	1.98 50.3	-
6ED4C	1.98 50.3	1.19 30.2	0.85 21.6	1.575 40.01	1.98 50.3	.295 7.5
6ED8C	1.98 50.3	1.19 30.2	0.81 20.06	1.575 40.01	1.98 50.3	.295 7.5
10ED1 /1C, 15ED1	2.62 66.5	1.19 30.2	0.81 20.6	1.575 40.01	1.98 50.3	-
15ED8	1.98 50.3	1.19 30.2	0.81 20.06	1.575 40.01	1.98 50.3	-

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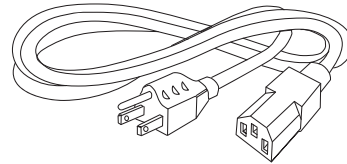
Recommended Panel Cutouts



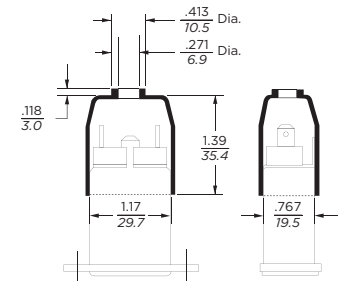
Note 1: ED1 and ED8 allow for front or back mounting
Note 2: ED2 and ED4 allow for back mounting only

Accessories

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



FA601: Insulating Shroud

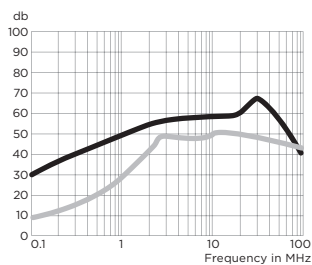


Performance Data

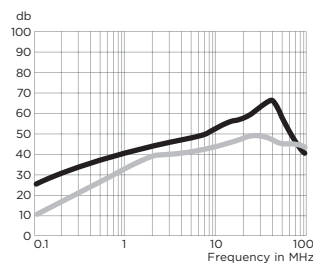
Typical Insertion Loss

Measured in closed 50 Ohm system

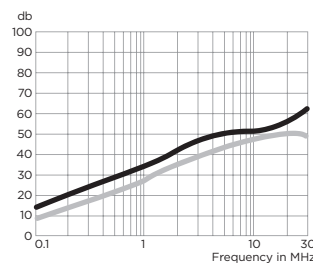
1ED



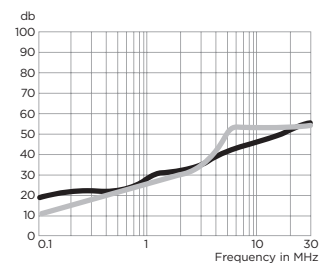
3ED



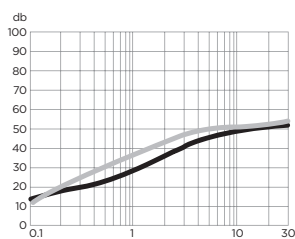
6ED



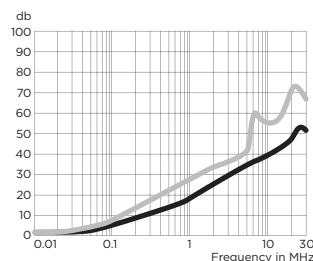
6ED1C



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