

F1700/F1799 RFI Filters

Features:

- General Purpose — Designed for Applications with Higher Differential Mode Noise
- Higher Line-to-Line Capacitance for Protection from Pulsed, Intermittent or Continuous RFI
- A Cost-Effective Replacement for Independent Coil Design in Many SMPS Applications
- Available with Integral IEC Connector



Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz

Rated Current:	115VAC	250VAC
	3A	2.5A
	6A	4A
	10A	6A
	20A	10A
	30A	15A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground	1500VAC
Line to Line	1768VDC

Insulation Resistance: $9 \times 10^9 \Omega$ at 100VDC

Ambient Temperature: 40°C Max. at rated current

Humidity Range: 0% to 95% R.H.

Termination:

A: QC – Quick Connect	C: IEC Receptacle
B: Wire	D: Screw

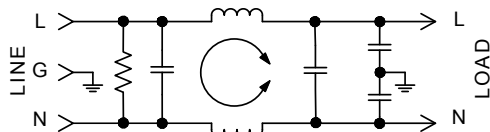
Maximum Leakage Current:

	F1700	F1710	F1720	F1740	F1799
Each Line to Ground					
115VAC, 60Hz:	0.40mA	.15mA	.002mA	.060mA	0.25mA
250VAC, 50Hz:	0.75mA	.25mA	.005mA	.120mA	0.45mA

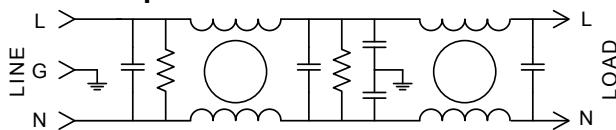
Agency Approvals:



F1700 Simplified Schematic



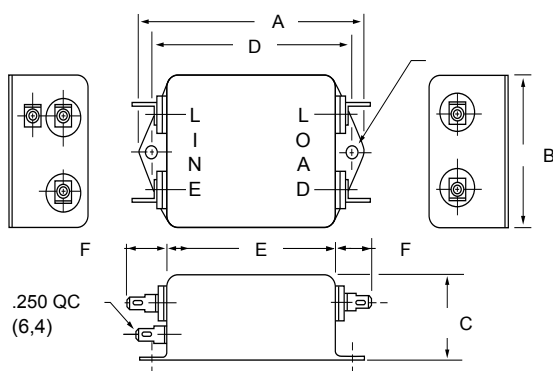
F1799 Simplified Schematic



Nominal Current Rating	Part Number	Termination Line/Load	MODE	MINIMUM INSERTION LOSS - dB (50 ohm Circuit)					
				.15	.50	1.0	5.0	10	30
3A	F1700AA03	QC/QC	Common Differential	20	35	43	52	55	50
	F1700BB03	Wire/Wire		25	60	65	65	50	50
	F1700CA03	IEC/QC							
3A	F1710AA03	QC/QC	Common Differential	20	34	40	45	45	40
				25	60	65	65	50	50
	F1720AA03	QC/QC		20	32	35	35	35	40
				35	60	65	60	55	40
3A	F1740AA03	QC/QC	Common Differential	20	30	35	35	35	40
				35	60	65	60	55	40
6A	F1700AA06	QC/QC	Common Differential	10	22	30	46	50	45
	F1700BB06	Wire/Wire		15	50	65	60	60	60
	F1700CA06	IEC/QC							
10A	F1700AA10	QC/QC	Common Differential	10	22	30	46	50	45
	F1700BB10	Wire/Wire		20	45	60	65	60	55
	F1700CA10	IEC/QC							
20A	F1700AA20	QC/QC	Common Differential	10	22	30	42	47	40
		Screw/Screw		15	45	60	65	60	55
	F1700DD20	Screw/Screw		10	22	30	42	47	52
	F1720DD20	Screw/Screw		15	45	60	65	60	55
30A	F1700DD30	Screw/Screw	Common Differential	7	15	20	34	42	40
				15	45	60	65	60	55
	F1799DD30	Screw/Screw		10	45	55	60	60	50
				15	65	65	65	60	55

NOTE: Other combinations of terminals may be specified on special order.

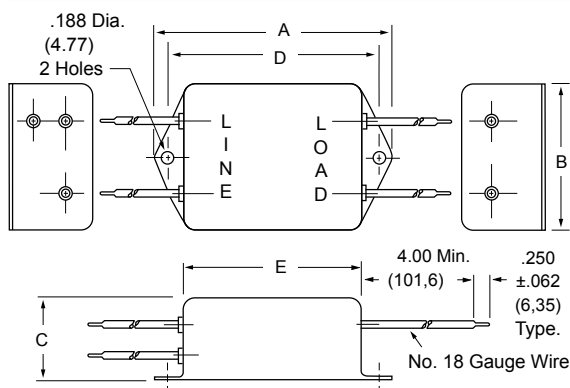
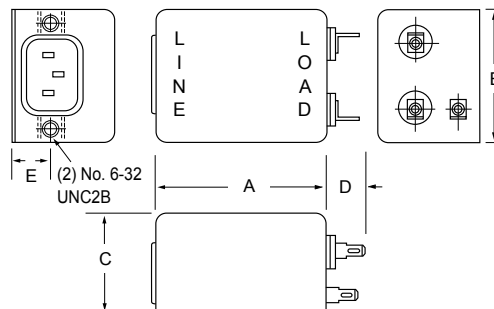


F1700AA, 1710, 1720, 1740 (3, 6 and 10Amp) Dimensions

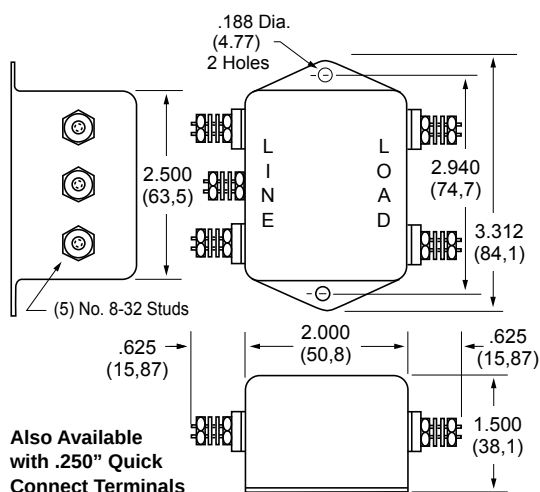
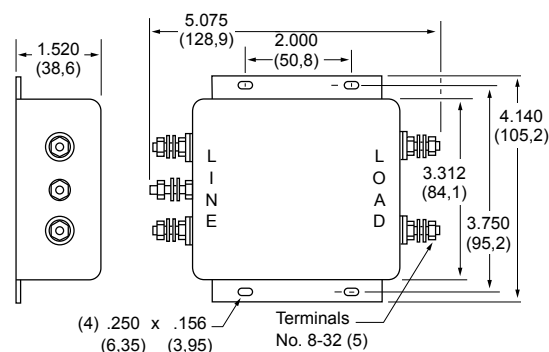
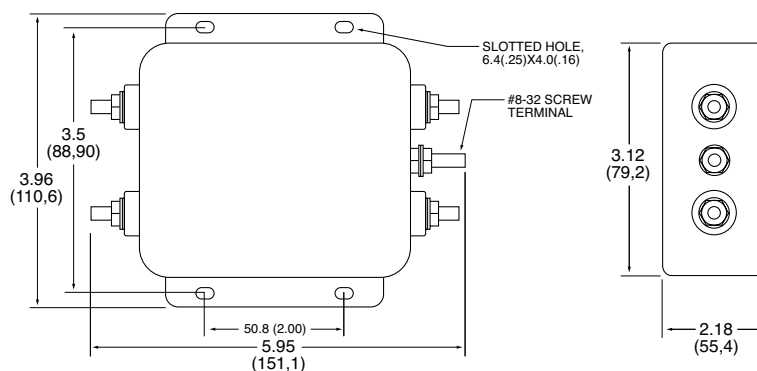
Amps	A	B	C	D	E	F
3A	2.750 (69,8)	1.750 (44,4)	1.125 (28,5)	2.375 (60,3)	2.000 (50,8)	.550 (14,0)
6A	3.312 (84,1)	2.000 (50,8)	1.125 (28,5)	2.940 (74,7)	2.500 (63,5)	.550 (14,0)
10A	3.312 (84,1)	2.000 (50,8)	1.500 (38,2)	2.940 (74,7)	2.500 (63,5)	.550 (14,0)
20A	See 1700DD20 for Case Dimensions					

F1700BB (3, 6 and 10Amp) Dimensions

Amps	A	B	C	D	E
3A	2.750 (69,8)	1.750 (44,4)	1.125 (28,5)	2.375 (60,3)	2.000 (50,8)
6A	3.312 (84,1)	2.000 (50,8)	1.125 (28,5)	2.940 (74,7)	2.500 (63,5)
10A	3.312 (84,1)	2.000 (50,8)	1.500 (38,1)	2.940 (74,7)	2.500 (63,5)

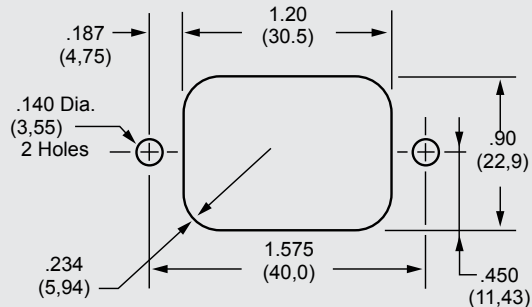
**F1700CA**(3, 6 and 10Amp)
DimensionsRefer to Page 40
for Standard
Mounting Cutouts

Amps	A	B	C	D	E
3A	2.000 (50,8)	2.000 (50,8)	1.500 (38,1)	.550 (14,0)	.565 (14,3)
6A	2.500 (63,5)	2.000 (50,8)	1.500 (38,1)	.550 (14,0)	.565 (14,3)
10A	2.500 (63,5)	2.000 (50,8)	1.500 (38,1)	.550 (14,0)	.565 (14,3)

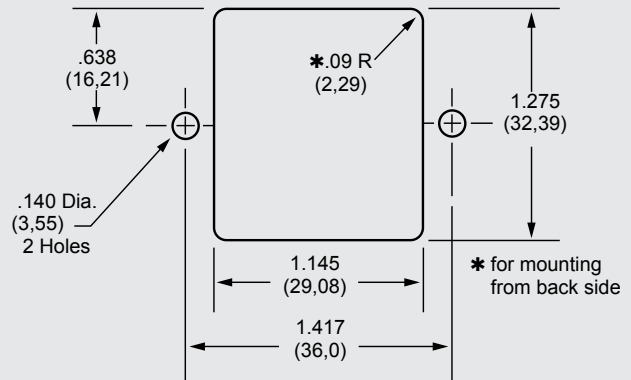
F1700DD20 (20Amp) DimensionsAlso Available
with .250" Quick
Connect Terminals**F1700DD30**(30Amp)
Dimensions**F1799DD (30Amp) Dimensions**

Standard Mounting Cutouts

F1200CA, F1300CA, F1400CA, F1500CA, F1600CA, F1700CA



F1500FA, F1600FA,



How to Order

The Curtis part numbering system is made up of four elements. Each element denotes a specific requirement (mechanical or electrical) which, when properly sequenced, fully identifies the required catalog filter. As shown, the first five alpha/numeric characters denote the series type; the sixth character (alpha) denotes the type of line termination; the seventh character (alpha) denotes the type of load termination; the last two characters (numeric) denote the current rating.

Compose your part number as follows: Select the series required, add two alpha character for the line and load termination, followed by two numeric characters for the required current rating. For example, F1100AB06 completely identifies an F1100 series filter with quick connects on line side and wire leads on load side, with a 6-amp rating.

F1100

X

X

X

SERIES
PE = Power Entry
PM = Medical
Power Entry

LINE TERMINATION
A = Quick Connects
B = Wire Leads
C = IEC Connector
D = Screw Terminals
(20 & 30 amp only)
F = Fused IEC
P = Printed Circuit Pins
W = Dual Fused IEC
J = Switched IEC

LOAD TERMINATION
A = Quick Connects
B = Wire Leads
D = Screw Terminals
(20 & 30 amp only)
P = Printed Circuit Pins
S = Solder Tab

CURRENT RATING
01 = 1 Amp
03 = 3 Amps
06 = 6 Amps
10 = 10 Amps
15 = 15 Amps
20 = 20 Amps
30 = 30 Amps

F5500/5600/5700 SERIES

