

F1591 Series

1. Features of F1591Series:

- Single stage multi-purpose Power Entry EMI Filters modules with single or Double Fuse modules
- Designed to suppress Common and Differential mode emissions
- Current Rating: 1A to 10A
- Voltage Rating: 115/250VAC
- Frequency: 50/60Hz
- Hi-Pot Rating: Line to Ground 2250VDC for 2 sec
- Hi-Pot Line to Line: 1450VDC for 2 sec
- Ambient Temperature Range: -25°C To +85°C
- Filter components are encapsulated in a plated metal enclosure
- Leakage Current: 0.45mA max. @ 250VAC 50Hz
- Power Supplies, UPS, Inverters, Convertors, Medical equipment, House Hold Appliances, etc.



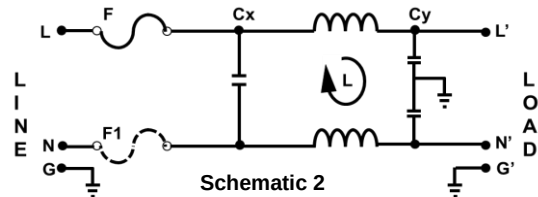
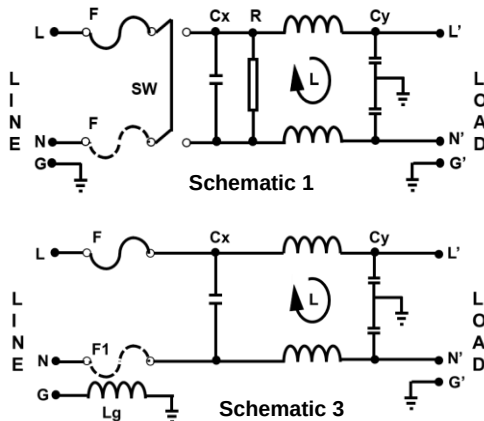
2. Electrical Characteristics :

ITG Part Number	Operating Current (A) at 40°C	Output terminal	Schematic
F1591V001C	1.0	Fast-on 250	1, 2 or 3
F1591V003C	3.0	Fast-on 250	1, 2 or 3
F1591V006C	6.0	Fast-on 250	1, 2 or 3
F1591V010C	10.0	Fast-on 250	1, 2 or 3

Notes:

1. 1A, 3A, 6A and 10A filter can be supplied with fast-on 157 for output termination and single or double Fuse.
2. Filters are available w/o Line to ground "Y" capacitors for medical equipment.
3. Please call ITG for additional filter P/N's.

3. Schematic:



● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275

● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767

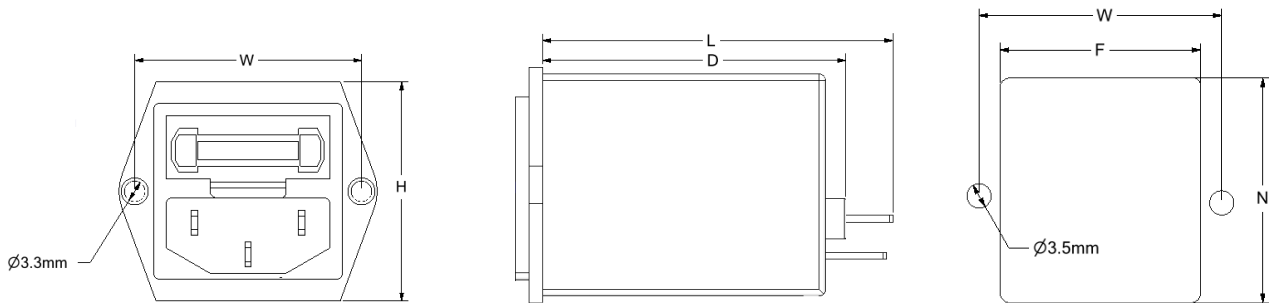
● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision A.1: Sep. 13, 2017

*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.

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4. Mechanical Dimensions (mm±2mm):

ITG Part Number	L	W	H	D	N	F	Ground Terminal
F1591V001C	52.9	36.0	32.8	42.7	32.4	29.0	Fast-on 250
F1591V003C	52.9	36.0	32.8	42.7	32.4	29.0	Fast-on 250
F1591V006C	52.9	36.0	32.8	42.7	32.4	29.0	Fast-on 250
F1591V010C	52.9	36.0	32.8	42.7	32.4	29.0	Fast-on 250



5. Insertion Loss at 50Ω system: Attenuation data shown below is for schematic 1

Freq.(MHz) P/N	CM(dB)							DM(dB)						
	0.15	0.5	1	5	10	30	50	0.15	0.5	1	5	10	30	50
F1591V001C	34	38	40	32	28	11	1	9	25	37	68	62	15	5
F1591V003C	28	36	39	45	48	39	29	9	19	27	58	65	16	6
F1591V006C	19	29	36	49	53	39	29	8	18	25	5	60	32	22
F1591V010C	14	18	22	38	49	42	32	17	42	64	58	59	30	20

Notes:

Filter current rating should be de-rated at ambient temperatures higher than +40°C from formula below:

$$\text{Operating current} = \text{Rated Current} \times ((85 - \text{Operating temperature})/45)^{0.5}$$