F1592 Series

1. Features of F1592Series:

- Single stage multi-purpose Power entry EMI Filters with Switch and single 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, Industrial and Medical equipment, etc.

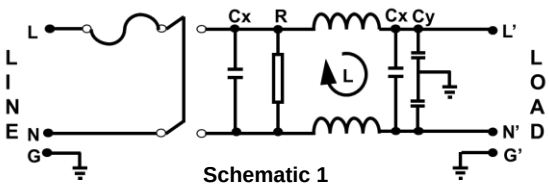
2. Electrical Characteristics :

ITG Part Number	Operating Current (A) at 40ºC	Output terminal	Schematic
F1592Q001C	1.0	Fast-on 250	1, 2 or 3
F1592Q003C	3.0	Fast-on 250	1, 2 or 3
F1592Q006C	6.0	Fast-on 250	1, 2 or 3
F1592Q010C	10.0	Fast-on 250	1, 2 or 3

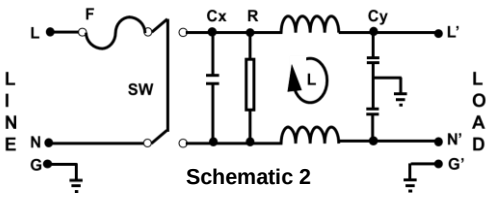
Notes:

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

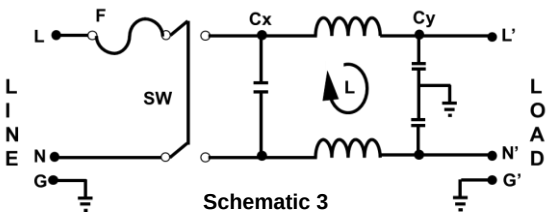
3. Schematic:



Schematic 1



Schematic 2



Schematic 3

● **New York** *1 914 347 2474* ● **Taipei** *886 2 2698 8669* ● **Kaohsiung** *886 7 350 2275*
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**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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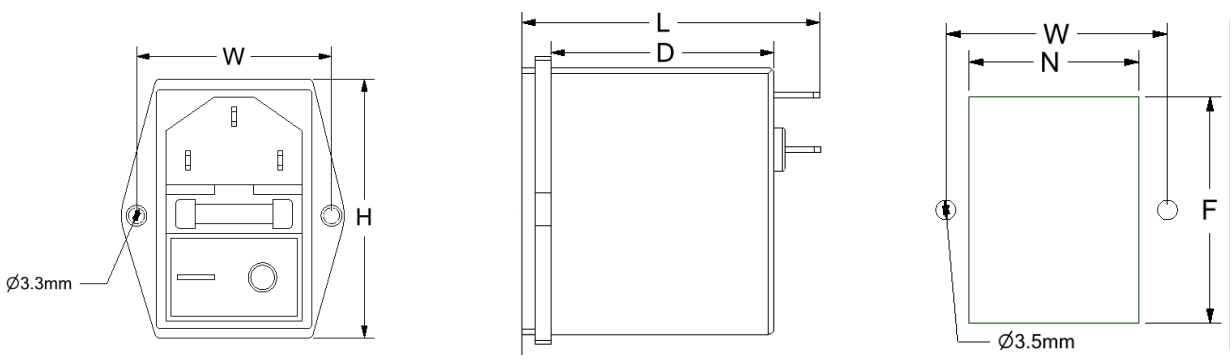
4. Mechanical Dimensions (mm±2mm):

ITG Part Number	L	W	H	D	N	F	Ground Terminal
F1592Q001C	56.4	40.0	53.0	41.0	30.0	48.0	Fast-on 250
F1592Q003C	56.4	40.0	53.0	41.0	30.0	48.0	Fast-on 250
F1592Q006C	56.4	40.0	53.0	41.0	30.0	48.0	Fast-on 250
F1592Q010C	56.4	40.0	53.0	41.0	30.0	48.0	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
F1592Q001C	34	38	40	32	28	11	1	11	9	37	71	62	13	3
F1592Q003C	28	36	39	45	48	39	29	39	9	27	58	65	16	6
F1592Q006C	19	29	36	49	53	39	29	39	8	25	57	60	32	22
F1592Q010C	14	18	22	38	49	42	32	17	42	64	58	49	30	20

Notes:
Filter current rating should be de-rated at ambient temperatures higher than +40ºC from formula below:
Operating current = Rated Current X ((85 - Operating temperature)/45)$^{0.5}$

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