

High Performance RFI Power Line Filters for Switching Power Supplies

T Series



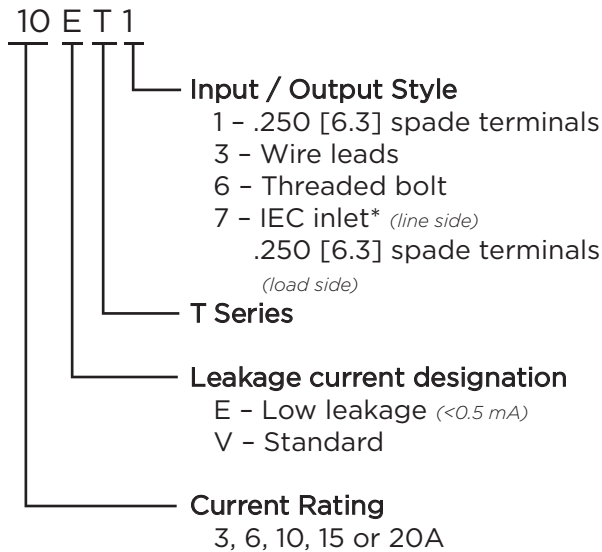
UL Recognized
CSA Certified
VDE Approved



T Series

- Superior common-mode and premium differential-mode attenuation
- Smaller package sizes than the EP Series
- Size and cost-effective
- ET models can help meet very low leakage current requirements

Ordering Information



*IEC 60320-1 C14 inlet mates with C13 connector

Specifications

Maximum leakage current each Line to Ground:

	<u>ET Models</u>	<u>VT Models</u>
3, 6 & 10A		
@120 VAC 60 Hz:	.30 mA	.75 mA
@250 VAC 50 Hz:	.50 mA	1.2 mA
15 & 20A		
@120 VAC 60 Hz:	.30 mA	1.2 mA
@250 VAC 50 Hz:	.50 mA	2.0 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:

3 to 20A

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

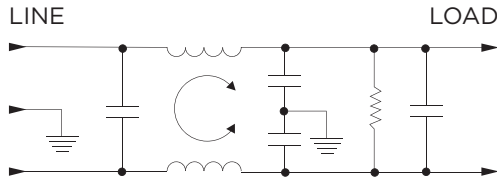
3ET1	10ET1	10VT1
3ET3	10ET3	10VT3
3ET7	15ET1	15VT1
6ET1	15ET6	15VT6
6ET3	20ET1	20VT1
6ET7	20ET6	20VT6

High Performance RFI Filters for Switching Power Supplies *(continued)*

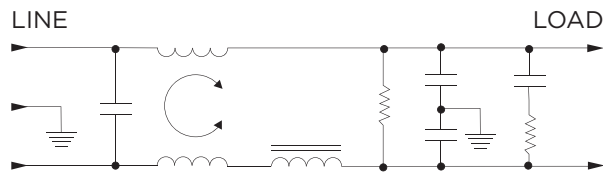
T Series

Electrical Schematics

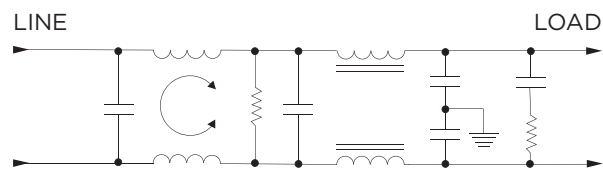
3 & 6A



10A

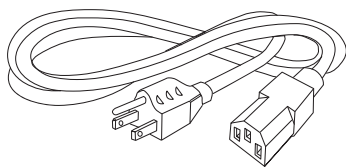


15 & 20A



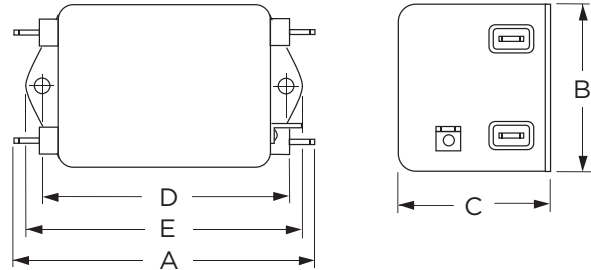
Accessories

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



Case Styles

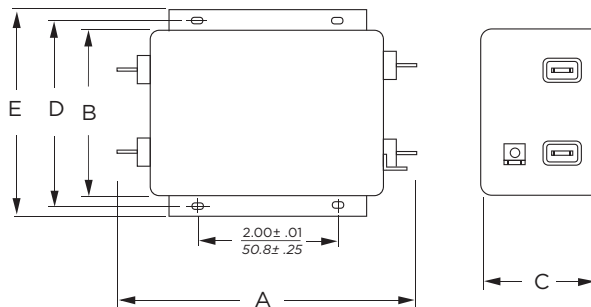
T1 (3, 6, 10A)



Typical Dimensions:

- Line/Load Terminals (4): .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
- Mounting Holes (2): .188 [4.78] Dia.

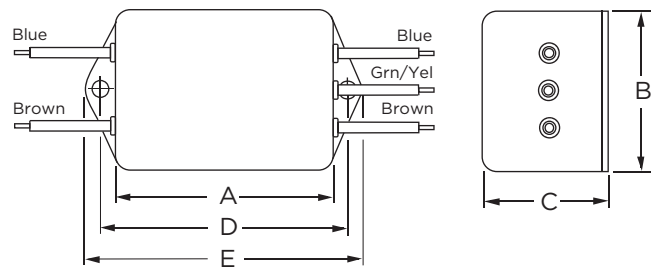
T1 (15 & 20A)



Typical Dimensions:

- Line/Load Terminals (4): .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
- Mounting Slots (4): .250 x .156 [6.35 x 3.96] Dia.

T3



Typical Dimensions:

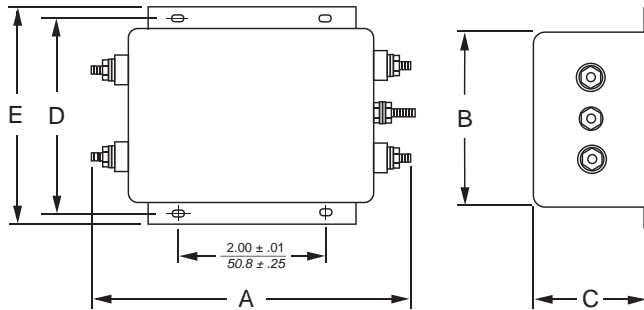
- Wire Leads (5): 4.0 [101.6] Min., AWG18
- Mounting Holes (2): .188 [4.78] Dia.

High Performance RFI Filters for Switching Power Supplies *(continued)*

T Series

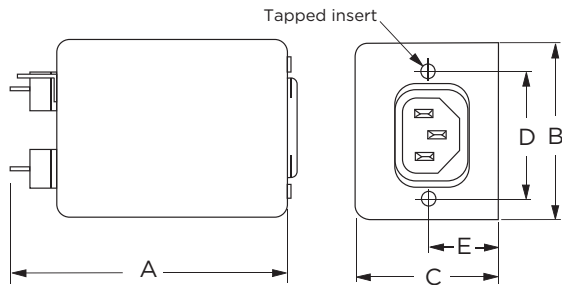
Case Styles *(continued)*

T6



Typical Dimensions:
 Terminals (5): 8-32, Torque 18 lbf-in. [2.03 N-m] max. ± 2 [.22]
 Mounting Slots (4): .250 x .156 [6.35 x 3.96] Dia.

T7



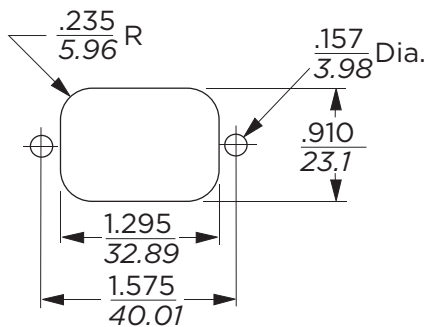
Typical Dimensions:
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot
 Line Inlet (1): IEC 60320-1 C14
 Tapped Inserts (2): 6-32 x 1/4

Case Dimensions

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3ET1, 6ET1	3.56 90.4	2.15 54.6	1.81 46.0	2.938 74.63	3.38 85.9
3ET3, 6ET3	2.55 64.8	2.15 54.6	1.81 46.0	2.938 74.63	3.38 85.9
3ET7, 6ET7	3.52 89.4	2.25 57.2	1.78 45.2	1.575 40.01	0.63* 16.0*
10ET1, 10VT1	4.69 119.1	2.27 57.7	1.80 45.7	4.063 103.2	4.47 113.5
10ET3, 10VT3	3.69 93.7	2.27 57.7	1.80 45.7	4.063 103.2	4.47 113.5
15ET1, 15VT1, 20ET1, 20VT1	5.45 138.4	3.12 79.2	2.18 55.4	3.5 88.9	3.96 100.6
15ET6, 15VT6, 20ET6, 20VT6	5.95 151.1	3.12 79.2	2.18 55.4	3.5 88.9	3.96 100.6

*±0.02 [0.5]

Recommended Panel Cutout



Tolerance ± .005 [0.13]

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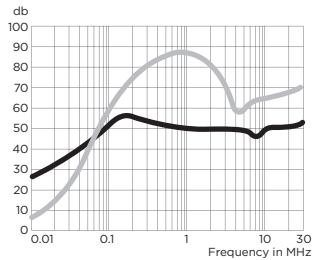
Performance Data

Typical Insertion Loss

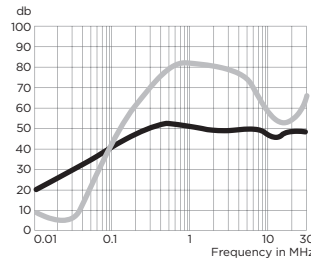
Measured in closed 50 Ohm system

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

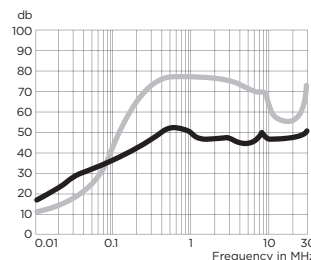
3ET



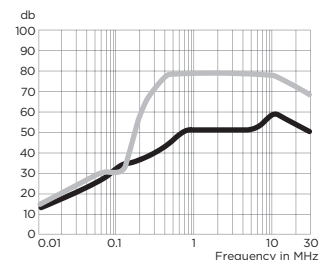
6ET



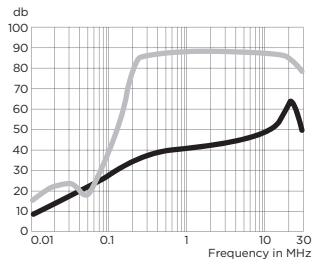
10ET



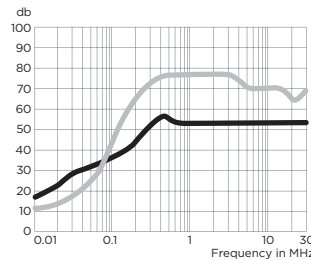
15ET



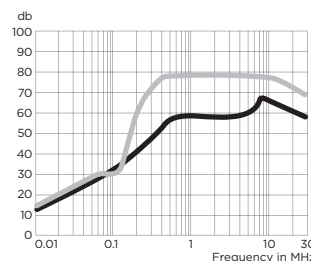
20ET



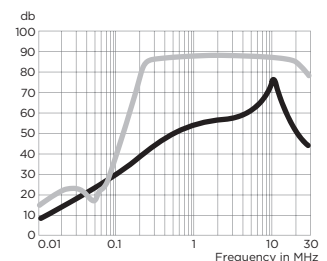
10VT



15VT



20VT



Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz										
	.01	.03	.05	.15	.5	1	2	5	10	20	30
ET Models											
3A	22	32	36	46	47	44	43	40	42	42	42
6A	16	26	30	41	47	44	43	43	40	42	42
10A	12	22	26	36	47	42	42	40	42	42	45
15A	8	17	22	31	43	44	44	42	47	52	43
20A	3	12	17	26	34	36	37	37	42	47	38

Current Rating	Frequency – MHz										
	.01	.03	.05	.15	.5	1	2	5	10	20	30
ET Models											
3A	3	1	30	61	70	70	70	50	50	50	55
6A	4	2	14	51	70	70	70	65	47	50	55
10A	7	12	17	52	70	70	70	65	55	50	60
15A	12	19	15	51	70	70	70	70	70	65	60
20A	10	17	13	51	70	70	70	70	67	65	60

VT Models											
Current Rating	.01	.03	.05	.15	.5	1	2	5	10	20	30
10A	12	22	26	38	52	50	50	50	50	50	50
15A	8	17	22	33	52	52	52	52	57	45	35
20A	3	12	17	29	42	47	50	51	55	40	30

VT Models											
Current Rating	.01	.03	.05	.15	.5	1	2	5	10	20	30
10A	7	12	17	52	70	70	70	65	65	50	65
15A	12	19	15	51	70	70	70	70	70	65	60
20A	10	17	13	51	70	70	70	70	67	65	60

Mouser Electronics

Authorized Distributor

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TE Connectivity:

[6ET7](#) [6ET1](#) [20VT1](#) [20VT6](#) [15VT1](#) [15VT6](#) [3ET7](#) [3ET1](#) [3ET3](#) [10ET1](#) [10ET3](#) [20ET1](#) [20ET6](#) [15ET6](#) [15ET1](#)
[6ET3](#) [10VT1](#) [10VT3](#)