

**High Performance RFI Power Line Filters for Switching Power Supplies**

# T Series



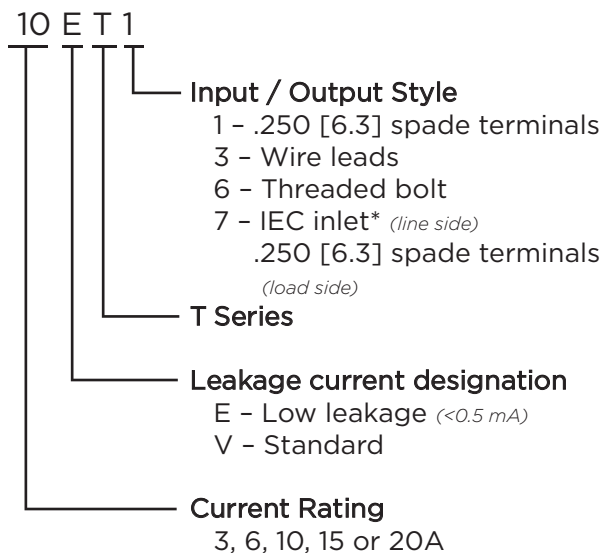
UL Recognized  
CSA Certified  
VDE Approved



## 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:

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

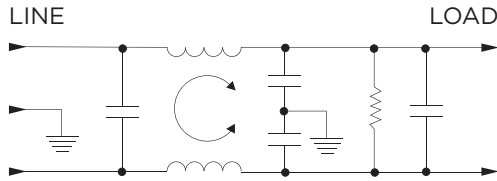
3ET1	10ET1	10VT1
3ET3	10ET3	10VT3
3ET7	15ET1	15VT1
6ET1	15ET6	15VT6
6ET3	20ET1	20VT1
6ET7	20ET6	20VT6

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

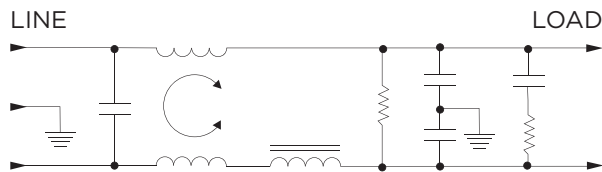
# T Series

## Electrical Schematics

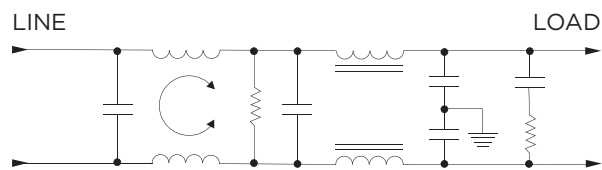
### 3 & 6A



### 10A

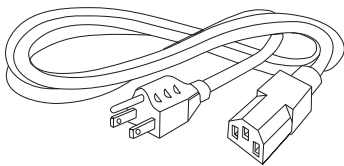


### 15 & 20A



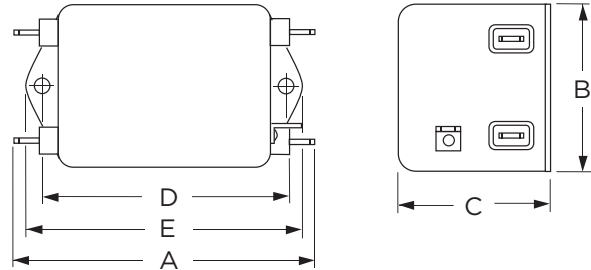
## Accessories

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



## Case Styles

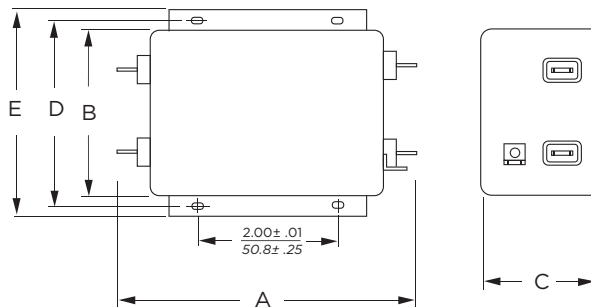
### T1 (3, 6, 10A)



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.

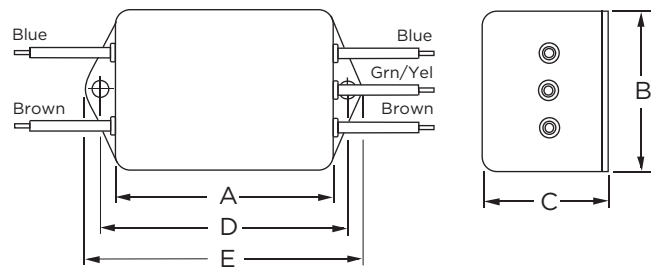
### T1 (15 & 20A)



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.

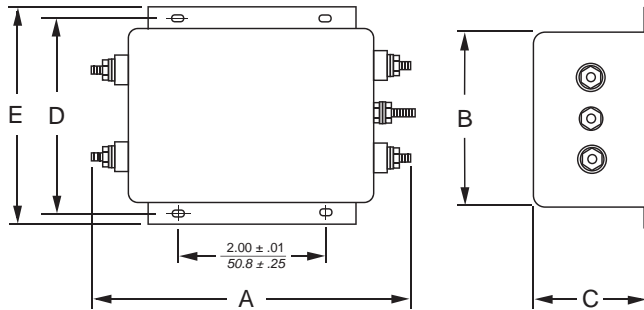
1  
RFI Power Line Filters

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

# T Series

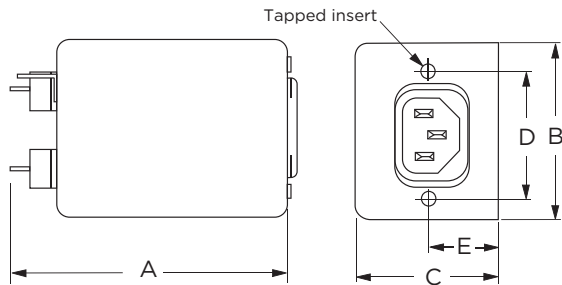
## Case Styles *(continued)*

### 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



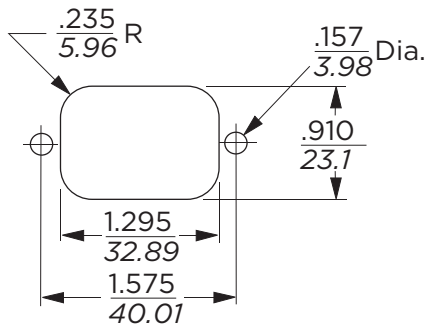
Typical Dimensions:  
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole  
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot  
 Line Inlet (1): IEC 60320-1 C14  
 Tapped Inserts (2): 6-32 x 1/4

## Case Dimensions

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

\*±0.02 [0.5]

## Recommended Panel Cutout



Tolerance ± .005 [0.13]

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

# T Series

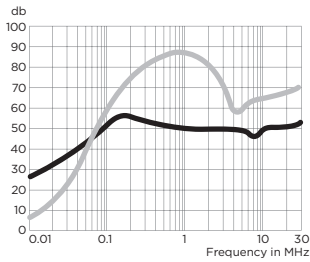
## Performance Data

### Typical Insertion Loss

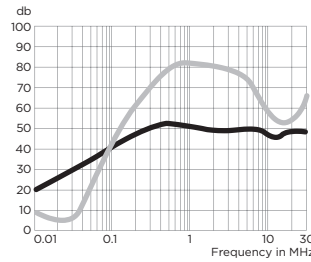
Measured in closed 50 Ohm system

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

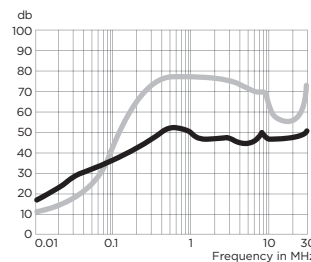
3ET



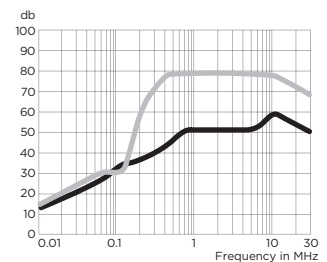
6ET



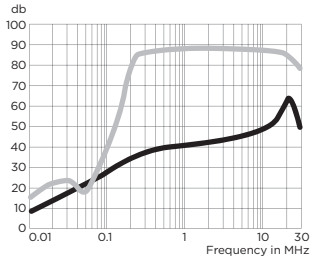
10ET



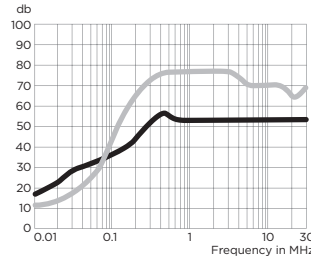
15ET



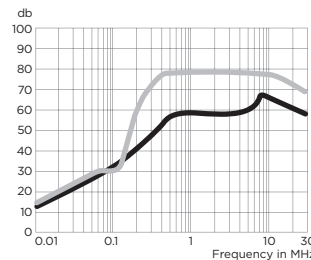
20ET



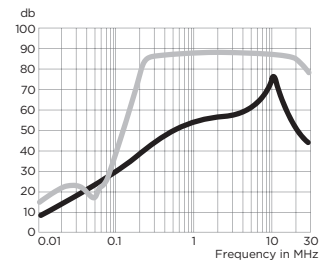
10VT



15VT



20VT



### Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency – MHz										
	.01	.03	.05	.15	.5	1	2	5	10	20	30
<b>ET Models</b>											
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

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz										
	.01	.03	.05	.15	.5	1	2	5	10	20	30
<b>ET Models</b>											
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**

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**

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