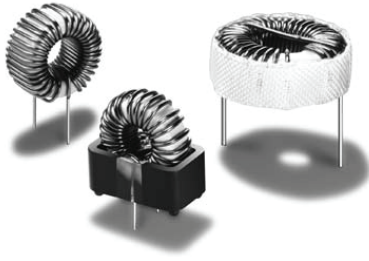


# THT Power Inductors

Toroid - Vertical, Low Profile and Klipmount™



- Available in vertical, low profile and Klipmount™
- SMPS averaging filter
- Characterized for general purpose use and ripple filters
- Single-layer designs
- Can be used as differential mode inductors in EMI filters<sup>3</sup>

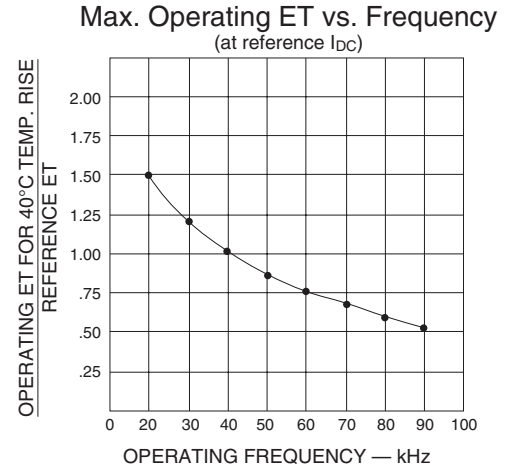
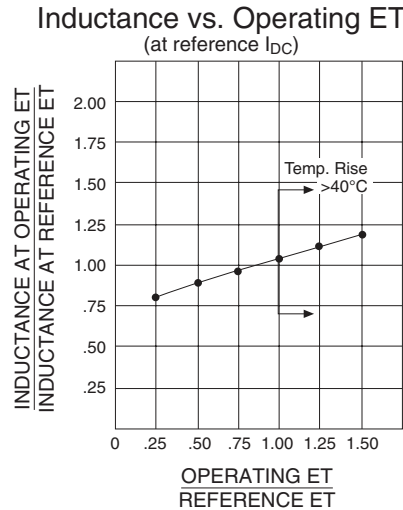
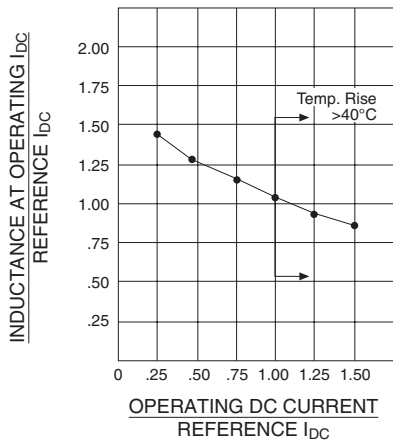


## Electrical Specifications @ 25°C - 0 perating Temperature -40°C to 130°C

Reference Operating Values						Design Control Values					
Vertical <sup>6</sup> Part Number	Low Profile Part Number	Inductance <sup>1</sup> Typical (μH)	IDC (AMPS)	ET <sub>OP</sub> (V-μSec)	Energy <sup>4</sup> Storage (μJ)	Inductance No DC (μH) (±20%)	20 kHz Test mV No DC	DCR <sup>5</sup> (Ω MAX)	Coil Size Code	Klip* Mount Package	Lead Diameter (in ± .003)
PE-51591NL	—	20	2.0	52	40	32.8	33	.060	H	—	.020
PE-92100NL	—	25	2.6	30	85	20.7	22	.043	A	KM1	.020
PE-92101NL	PE-92401NL	50	2.6	50	169	45.7	45	.071	B	KM2	.020
PE-92102NL	PE-92402NL	100	2.6	90	338	94.1	90	.100	C	KM3	.020
PE-92103NL	—	35	2.6	55	118	28.4	36	.037	B	KM2	.025
PE-92104NL	PE-92404NL	70	3.0	85	315	61.0	73	.052	C	KM3	.025
PE-92105NL	PE-92405NL	145	3.0	140	653	141.8	140	.087	D	KM4	.025
PE-92106NL	—	285	3.0	300	1283	264.1	340	.140	E	KM5	.025
PE-92107NL	—	450	3.0	425	2025	436.3	500	.200	F	—	.025
PE-92108NL	PE-92408NL	67	3.6	130	648	90.7	110	.045	D	KM4	.032
PE-92109NL	—	165	4.0	240	1320	152.0	260	.070	E	KM5	.032
PE-92110NL	—	270	4.0	350	2160	263.9	400	.100	F	—	.032
PE-92111NL	—	40	4.0	70	320	37.9	57	.027	C	KM3	.032
PE-51590NL	—	22	5.0	44	275	20.3	37	.020	G	—	.032
PE-92112NL	PE-92412NL	100	5.0	200	1250	90.7	180	.034	E	KM5	.042
PE-92113NL	—	170	5.0	300	2125	159.7	310	.050	F	—	.042
PE-92114NL	PE-92414NL	35.6	5.0	100	688	55.6	88	.023	D	KM4	.042
PE-92115NL	—	95	7.0	225	2328	96.0	200	.025	F	—	.051
PE-92116NL	PE-92416NL	55	7.0	150	1348	49.1	100	.017	E	KM5	.051
PE-92117NL	—	55	10.0	175	2750	55.9	120	.013	F	—	.064

\* Parts available with KlipMount option can be ordered by adding a "K" suffix to the part number (i.e. PE-92100K).

**Relationships Between Reference and Operating Conditions**



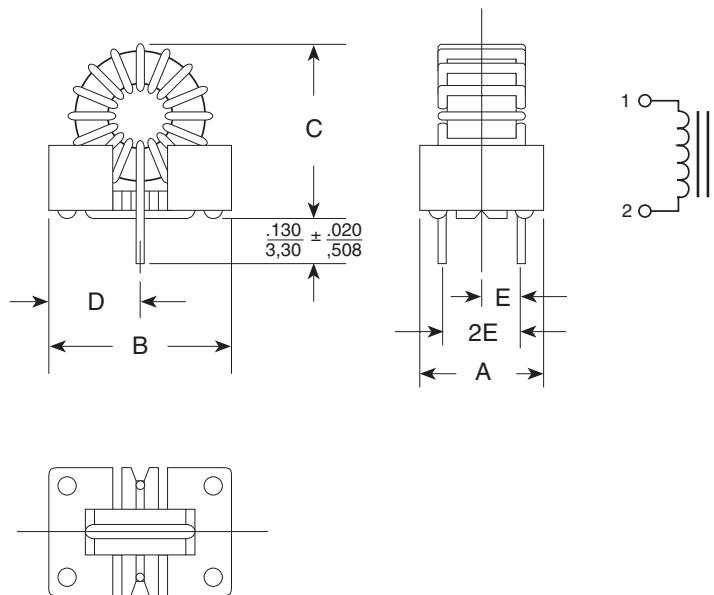
**Mechanical**

**Schematic**

**Klipmount™ Package**

- Base material meets flammability requirements of UL 94V-0
- Mechanically rigid mount
- PC Board - automatic insertability
- Lowest cost

Standard Package	A	B	C	D	E
	Maximum			Typical	
<b>KM-1</b>	.340 8,64	.580 14,73	.650 16,51	.29 7,37	.110 2,79
<b>KM-2</b>	.450 11,43	.650 16,51	.700 17,78	.325 8,26	.150 3,81
<b>KM-3</b>	.450 11,43	.850 21,59	.950 24,13	.415 10,54	.150 3,81
<b>KM-4</b>	.620 15,50	.970 24,64	1.10 27,94	.475 12,07	.225 5,72
<b>KM-5</b>	.700 17,78	1.30 33,02	1.40 35,56	.625 15,88	.250 6,35



**Note:** Units with large wire sizes may exceed B dimension.  
KLIPMOUNT™ is a trademark of Pulse Engineering, Inc.

**Dimensions:**  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

# THT Power Inductors

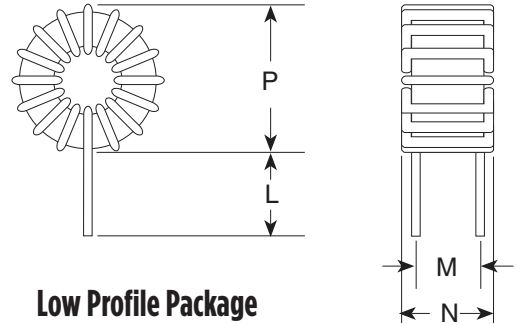
Toroid - Vertical, Low Profile and Klipmount™

## Mechanicals (continued)

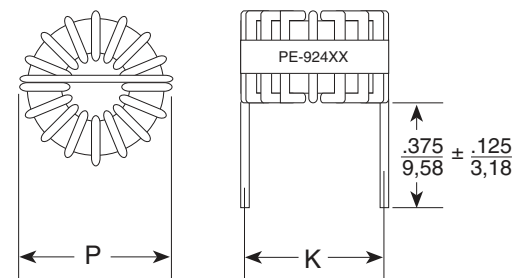
### Vertical and Low Profile Package

Size Code	P (MAX)	N (MAX)	L (+.125/- .025)	M	K
A	.550 13,97	.250 6,35	.375 9,53	.180 4,57	—
B	.700 17,78	.380 9,65	.375 9,53	.280 7,11	.530 ± .050 13,46 ± 1,27
C	.850 21,59	.410 10,41	.375 9,53	.280 7,11	.720 ± .050 18,29 ± 1,27
D	1.050 26,67	.550 13,97	.375 9,53	.400 10,16	.840 ± .020 21,24 ± 0,51
E	1.400 35,56	.700 17,78	.375 9,53	.500 12,7	1.100 ± .100 27,94 ± 2,54
F	1.650 41,91	.700 17,78	.375 9,53	.500 12,7	—
G	.850 21,59	.330 8,38	.330 8,38	.330 8,38	—
H	.650 16,26	.280 7,11	.280 7,11	.280 7,11	—

### Vertical Package



### Low Profile Package



#### Notes:

1. Typical Inductance occurs at  $I_{DC}$  and  $ET_{OP}$  values shown.
2. Design control test voltage is critical. Inductance increases with voltage.
3. For line filter applications, RMS line current is limited to specified reference DC current.
4.  $LI^2$  rating is the ability of the inductor to store energy.  
 $\frac{LI^2}{2}$
5. DCR for vertical part measured close to coil. Add 10% more for low profile part.

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