

THT Power Inductors

Toroid - Vertical, Low Profile and Klipmount™



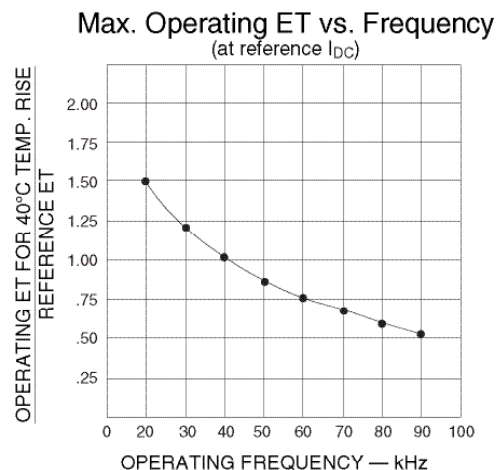
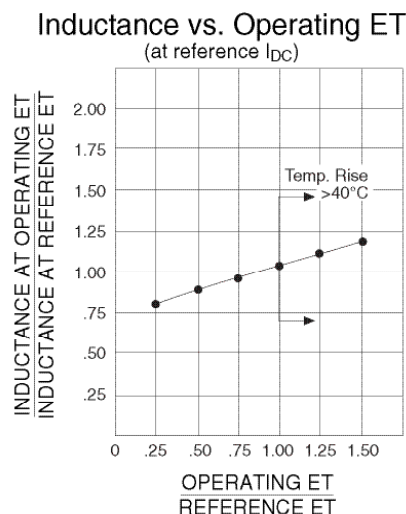
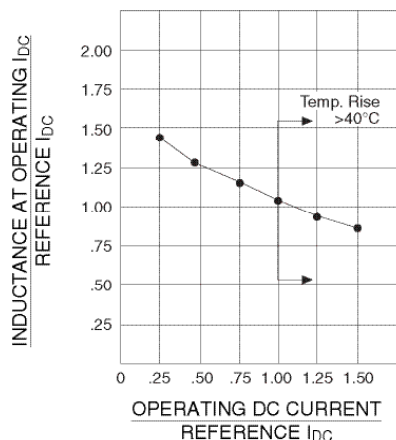
- Available in vertical, low profile and Klipmount™
- SMPS averaging filter
- Characterized for general purpose use and ripple filters
- Single-layer designs
- Can be used as differential mode inductors in EMI filters³

Electrical Specifications @ 25°C - Operating Temperature -40°C to 130°C

Reference Operating Values					Design Control Values					
Vertical Part Number	Low Profile Part Number	Inductance ¹ Typical (μH)	IDC (AMPS)	ET _{op} (V-μSec)	Inductance No DC (μH) (±20%)	20 kHz Test mV No DC	DCR ⁴ (Ω MAX)	Coil Size Code	Klip* Mount Package	Lead Diameter (in ± .003)
PE-51591NL	—	20	2.0	52	32.8	33	.060	H	—	.020
PE-92100NL	—	25	2.6	30	20.7	22	.043	A	KM1	.020
PE-92101NL	PE-92401NL	50	2.6	50	45.7	45	.071	B	KM2	.020
PE-92102NL	PE-92402NL	100	2.6	90	94.1	90	.100	C	KM3	.020
PE-92103NL	—	35	2.6	55	28.4	36	.037	B	KM2	.025
PE-92104NL	PE-92404NL	70	3.0	85	61.0	73	.052	C	KM3	.025
PE-92105NL	PE-92405NL	145	3.0	140	141.8	140	.087	D	KM4	.025
PE-92106NL	—	285	3.0	300	264.1	340	.140	E	KM5	.025
PE-92107NL	—	450	3.0	425	436.3	500	.200	F	—	.025
PE-92108NL	PE-92408NL	59.6	3.6	130	90.7	120	.045	D	KM4	.032
PE-92109NL	—	165	4.0	240	152.0	260	.070	E	KM5	.032
PE-92110NL	—	270	4.0	350	263.9	400	.100	F	—	.032
PE-92111NL	—	40	4.0	70	37.9	57	.027	C	KM3	.032
PE-51590NL	—	22	5.0	44	20.3	37	.020	G	—	.032
PE-92112NL	PE-92412NL	100	5.0	200	90.7	180	.034	E	KM5	.042
PE-92113NL	—	170	5.0	300	159.7	310	.050	F	—	.042
PE-92114NL	PE-92414NL	35.6	5.0	100	55.6	88	.023	D	KM4	.042
PE-92115NL	—	95	7.0	225	96.0	200	.025	F	—	.051
PE-92116NL	PE-92416NL	55	7.0	150	49.1	100	.017	E	KM5	.051
PE-92117NL	—	55	10.0	175	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

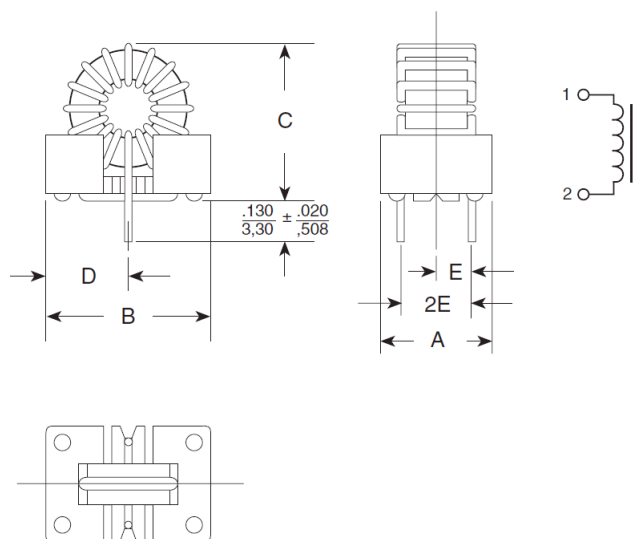
Klipmount™ Package

- 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	
KM-1	.340 8,64	.580 14,73	.650 16,51	.29 7,37	.110 2,79
KM-2	.450 11,43	.650 16,51	.700 17,78	.325 8,26	.150 3,81
KM-3	.450 11,43	.850 21,59	.950 24,13	.415 10,54	.150 3,81
KM-4	.620 15,50	.970 24,64	1.10 27,94	.475 12,07	.225 5,72
KM-5	.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 $\pm \frac{.010}{0,25}$



Mechanicals (continued)

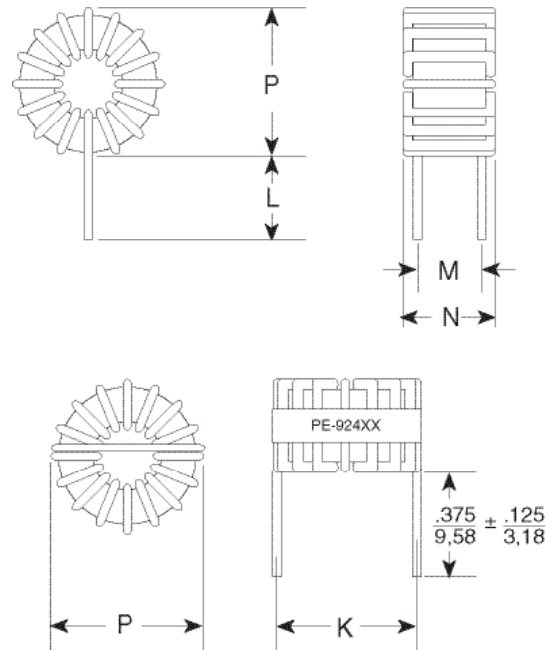
Vertical and Low Profile Package

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 ± .020 18,29 ± 1,27
D	1.050 26,67	.550 13,97	.375 9,53	.400 10,16	.840 ± .020 21,24 ± 1,27
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	—

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. DCR for vertical part measured close to coil. Add 10% more for low profile part.

Vertical Package



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