THT POWER INDUCTORS

Toroid - Vertical, Low Profile and *KlipMount*™

Pulse® A TECHNITROL COMPANY

RoHS COMPLIANT

- 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[3]

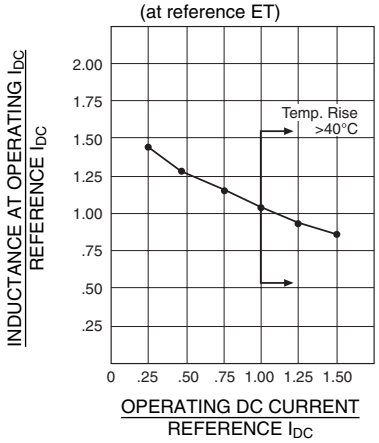
Electrical Specifications @ 25°C — Operating Temperature -40°C to 130°C

		Reference Operating Values				Design Control Values					
Vertical[6] Part Number	Low Profile Part Number	Inductance[1] Typical (µH)	I_{DC} (AMPS)	ET$_{OP}$ (V-µSec)	Energy[4] Storage (µJ)	Inductance No DC (µH) ±20%	20kHz Test mV No DC[2]	DCR[5] (Ω MAX)	Coil Size Code	Klip* Mount Package	Lead Diameter (In) ±.003
PE-51591	—	20	2.0	52	40	32.8	33	.060	H	—	.020
PE-92100	—	25	2.6	30	85	20.7	22	.043	A	KM1	.020
PE-92101	**PE-92401**	50	2.6	50	169	45.7	45	.071	B	KM2	.020
PE-92102	**PE-92402**	100	2.6	90	338	94.1	90	.100	C	KM3	.020
PE-92103	—	35	2.6	55	118	28.4	36	.037	B	KM2	.025
PE-92104	**PE-92404**	70	3.0	85	315	61.0	73	.052	C	KM3	.025
PE-92105	**PE-92405**	145	3.0	140	653	141.8	140	.087	D	KM4	.025
PE-92106	—	285	3.0	300	1283	264.1	340	.140	E	KM5	.025
PE-92107	—	450	3.0	425	2025	436.3	500	.200	F	—	.025
PE-92108	**PE-92408**	67	3.6	130	648	90.7	110	.045	D	KM4	.032
PE-92109	—	165	4.0	240	1320	152.0	260	.070	E	KM5	.032
PE-92110	—	270	4.0	350	2160	263.9	400	.100	F	—	.032
PE-92111	—	40	4.0	70	320	37.9	57	.027	C	KM3	.032
PE-51590	—	22	5.0	44	275	20.3	37	.020	G	—	.032
PE-92112	**PE-92412**	100	5.0	200	1250	90.7	180	.034	E	KM5	.042
PE-92113	—	170	5.0	300	2125	159.7	310	.050	F	—	.042
PE-92114	**PE-92414**	35.6	5.0	100	688	55.6	88	.023	D	KM4	.042
PE-92115	—	95	7.0	225	2328	96.0	200	.025	F	—	.051
PE-92116	**PE-92416**	55	7.0	150	1348	49.1	100	.017	E	KM5	.051
PE-92117	—	55	10.0	175	2750	55.9	120	.013	F	—	.064

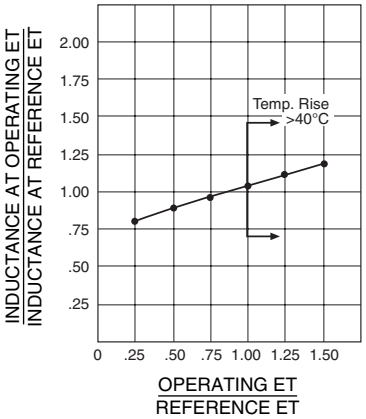
*Parts available with ***KlipMount*** option can be ordered by adding a "K" suffix to the part number (i.e. PE-92100**K**).

Relationships Between Reference and Operating Conditions

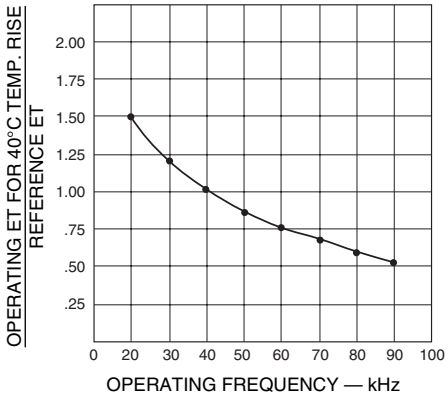
Inductance vs. DC Current
(at reference ET)



Inductance vs. Operating ET
(at reference I_{DC})



Max. Operating ET vs. Frequency
(at reference I_{DC})



USA 858 674 8100 • UK 44 1483 401 700 • France 33 3 84 35 04 04 • Singapore 65 6287 8998 • Shanghai 86 21 54643211 / 2 • China 86 769 85538070 • Taiwan 886 3 4641811

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Mechanicals

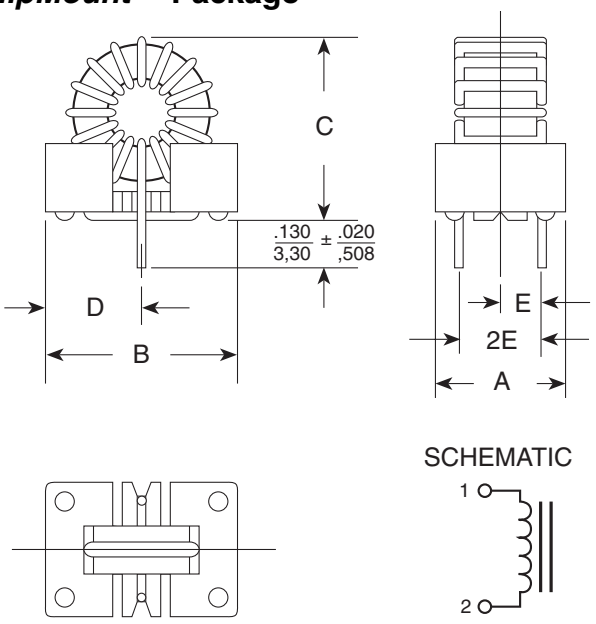
- Base material meets flammability requirements of UL 94V-0
- Mechanically rigid mount
- PC board — automatic insertability
- Lowest cost

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: Inches / mm Unless otherwise specified, all tolerances are ± .010 / 0,25

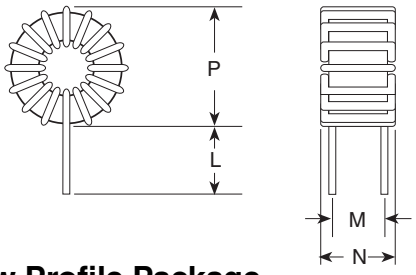
KlipMount™ Package



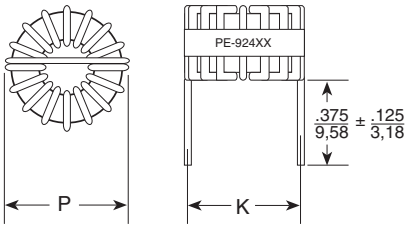
SCHEMATIC

Coil Size	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 / 13,46 ± .050 / 1,27
C	.850 / 21,59	.410 / 10,41	.375 / 9,53	.280 / 7,11	.720 / 18,29 ± .050 / 1,27
D	1.050 / 26,67	.550 / 13,97	.375 / 9,53	.400 / 10,16	.840 / 21,24 ± .020 / 0,51
E	1.400 / 35,56	.700 / 17,78	.375 / 9,53	.500 / 12,7	1.100 / 27,94 ± .100 / 2,54
F	1.650 / 41,91	.700 / 17,78	.375 / 9,53	.500 / 12,7	—
G	.850 / 21,59	.330 / 8,38	.875 / 22,23	.330 / 8,38	—
H	.640 / 16,26	.280 / 7,11	.875 / 22,23	.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. $\frac{LI^2}{2}$ rating is the ability of the inductor to store energy.
5. DCR for vertical part measured close to coil. Add 10% more for low profile part.
6. RoHS compliant parts are available. Order RoHS compliant parts by adding the suffix "**NL**" to the part number (i.e. PE-51591 becomes PE-51591**NL**).

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