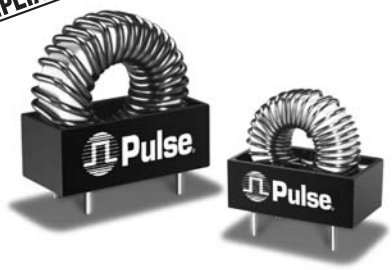
TOROIDAL INDUCTORS
High Current



- Cost-effective designs
- Semi-encapsulated construction
- Maximum operation temperature of 130°C (Ambient + Rise)
- A 2:1 inductance swing from zero to maximum current

Electrical Specifications @ 25°C

Reference Operating Values						Design Control Values				
Part Number	Inductance Typical (µH)2	I_{DC} (AMPS)	ET_{OP}1 (V-µSec)		Energy Storage (µJ MIN)3	Inductance No DC (µH) (±20%)	50kHz Test mV No DC5	DCR (Ω MAX)	Size Code	Lead Diameter (in ±.003)
			20kHz	40kHz						
PE-51506	17.0	17.0	190	130	2460	40.0	140	0.0065	3	0.081
PE-51507	32.0	16.0	290	200	4100	70.7	270	0.0092	4	0.081
PE-51508	60.0	16.0	390	270	7700	120.0	470	0.012	5	0.081
PE-51509	14.0	10.0	135	95	700	28.5	73	0.009	1	0.057
PE-51510	23.0	11.0	170	120	1400	43.5	130	0.012	2	0.057
PE-51511	43.0	10.0	280	195	2150	85.5	210	0.018	3	0.057
PE-51512	90.0	10.0	430	300	4500	158.0	420	0.028	4	0.057
PE-51513	144.0	10.0	570	400	7200	262.0	700	0.032	5	0.057
PE-51514	32.0	6.6	200	140	700	60.5	110	0.025	1	0.040
PE-51515	52.0	7.0	230	160	1275	92.0	190	0.032	2	0.040
PE-51516	98.0	6.0	400	280	1765	188.0	310	0.048	3	0.040
PE-51517	175.0	6.0	620	425	3150	315.0	560	0.068	4	0.040
PE-51518	335.0	6.0	840	580	6030	571.0	1000	0.095	5	0.040
PE-51520	400	3.6	600	420	2700	688.0	640	0.130	3	0.036

NOTES:

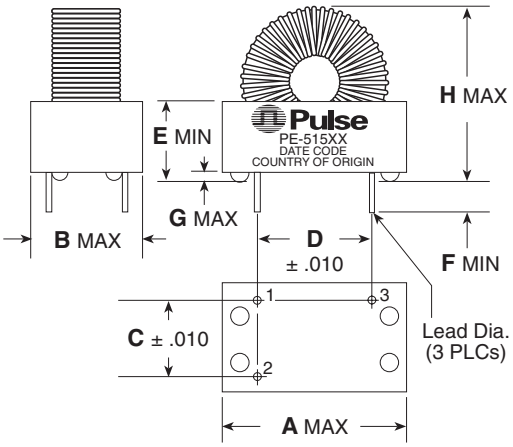
1. To prevent excessive temperature rise, limit ET_{OP} to the rated ET_{OP} specified. This is not a saturation limit. Temperature rise of inductors is 40°C MAX at MAX current and rated ET_{OP}.
2. A 2:1 nominal inductance swing from no I_{DC} to operating I_{DC} gives improved protection against current discontinuities at light loading. Inductance increases with greater ET_{OP}. Reference values occur at I_{DC} and low flux density.
3. $\frac{LI^2}{2}$ rating is the ability of the inductor to store energy.
4. Design control test voltage is critical. Inductance increases with voltage.
5. RoHS compliant parts are available. Order RoHS compliant parts by adding the suffix "**NL**" to the part number (i.e. PE-51506 becomes PE-51506**NL**).

Size Code	1	2	3	4	5
A	1.20/30,48	1.44/36,57	1.60/40,64	1.95/49,53	2.30/58,42
B	0.60/15,24	0.80/20,32	0.80/20,32	0.91/23,11	1.11/28,19
C	0.40/10,16	0.60/15,24	0.60/15,24	0.70/17,78	0.90/22,85
D	0.80/20,32	0.90/22,86	0.90/22,86	1.20/30,48	1.50/38,10
E	0.45/11,43	0.70/17,78	0.70/17,78	0.90/22,86	1.00/25,40
F	0.20/5,08	0.20/5,08	0.20/5,08	0.20/5,08	0.20/5,08
G	.015/0,381	0.03/0,76	0.03/0,76	0.03/0,76	0.03/0,76
H	1.20/30,48	1.44/36,57	1.72/43,68	2.00/50,80	2.30/58,42

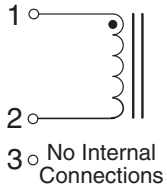
Mechanical

Dimensions: Inches / mm

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



Schematic



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