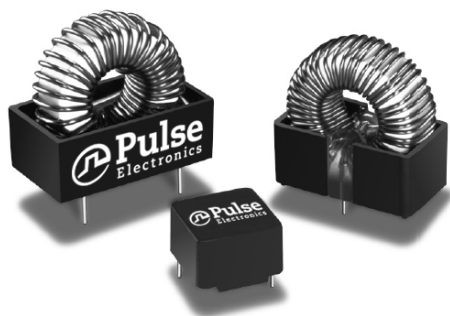
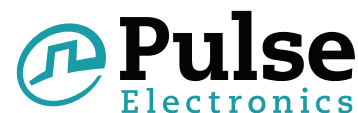


# Inductors Designed for National's 50 kHz Simple Switcher™



- Designed for use with National's device numbers LM2574/LM2575/LM2576
- Base material meets flammability requirements of UL 94V-0
- Performance verified by National Semiconductor

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

Part Identification		Reference Operating Values <sup>1</sup>			Design Control Values			
Part Number	Inductor Code	Inductance Typical (μH)	I <sub>dc</sub> (Amps)	E <sub>Top</sub> (V-μSec)	Inductance No DC <sup>2</sup> (μH ± 20%)	DCR (Ω MAX)	Package Style	Lead Diameter
PE-53112NL	L47	47	3.0	90	38	0.05	KM-2.0	.025
PE-92114KNL	L68	36	5.0	90	56	0.02	KM-4.0	.040
PE-92108KNL	L100	100	3.0	90	91	0.04	KM-4.0	.032
PE-53113NL	L150	150	2.0	90	130	0.10	KM-4.0	.025
PE-52626NL	L220	220	1.4	90	230	0.38	Low Profile	.025 SQ.
PE-53145NL	L220	220	1.4	90	176	0.14	KM-3.0	.020
PE-52627NL	L330	330	0.9	90	302	0.74	Low Profile	.025 SQ.
PE-53146NL	L330	330	0.9	90	267	0.18	KM-3.0	.020
PE-53114NL	L470	470	0.64	90	426	0.16	KM-4.0	.025
PE-52629NL	L680	680	.85	90	657	1.25	Low Profile	.025 SQ.
PE-53115NL	H150	150	3.0	200	136	0.10	KM-4.0	.025
PE-53116NL	H220	220	3.0	200	167	0.07	KM-5.0	.032
PE-53117NL	H330	330	3.0	200	292	0.15	KM-5.0	.025
PE-53118NL	H470	470	2.0	200	369	0.17	KM-5.0	.025
PE-53119NL	H680	680	1.3	200	562	0.20	KM-5.0	.025
PE-53120NL	H1000	1000	0.95	200	762	0.24	KM-5.0	.025
PE-53121NL	H1500	1500	0.62	200	1150	1.00	Case	.032
PE-53122NL	H220	2200	0.42	200	1886	1.80	Case	.032

### NOTES:

1. Typical inductance occurs at the I<sub>dc</sub> and E<sub>Top</sub> values shown.
2. The control value of inductance is measured at B<sub>op</sub> equal to or less than 10 gauss without DC current.
3. Inductance decreases with higher values of DC current and increases with lower values of DC current.
4. Inductance increases with increase in B<sub>op</sub> or E<sub>Top</sub>.
5. SIMPLE SWITCHER™ is a trademark of National Semiconductor Corporation.

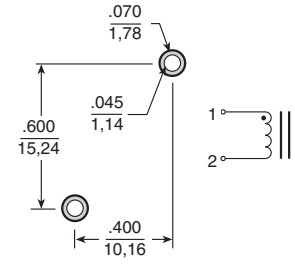
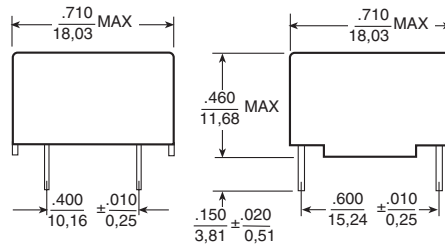
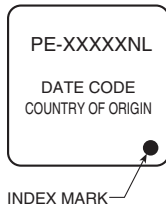
# Inductors Designed for National's 50 kHz Simple Switcher™



## Mechanicals

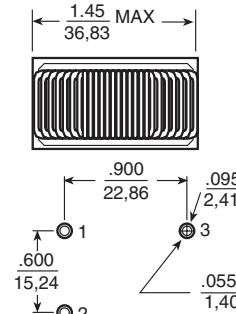
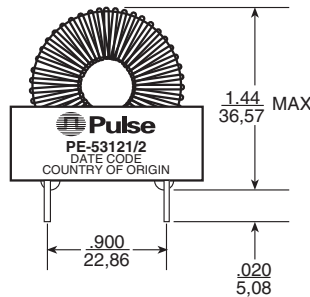
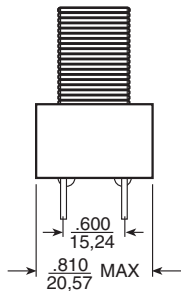
## Schematics

### Low Profile Series

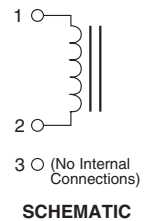


SUGGESTED PAD LAYOUT

### Case Series



SUGGESTED PAD LAYOUT

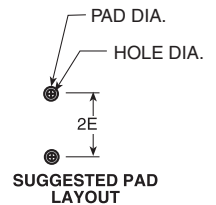
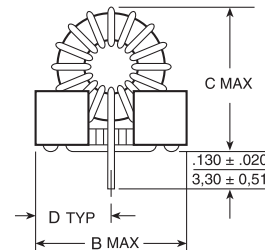
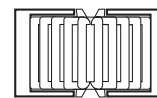


SCHEMATIC

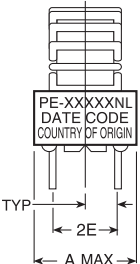
### KlipMount Series

PKG	A	B	C	D	E
KM-2.0	.450	.650	.700	.325	.150
	11,43	16,51	17,78	8,26	3,81
KM-3.0	.450	.850	.950	.415	.150
	11,43	21,59	24,13	10,54	3,81
KM-4.0	.610	.970	1.10	.475	.225
	15,50	24,64	27,94	12,07	5,72
KM-5.0	.710	1.30	1.40	.625	.250
	18,03	33,02	35,56	15,88	6,35

LEAD DIA.	HOLE DIA.	PAD DIA.
.025	.035	.060
.025 SQ.	.048	.074
.032	.045	.070
.040	.056	.080



SUGGESTED PAD LAYOUT



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

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