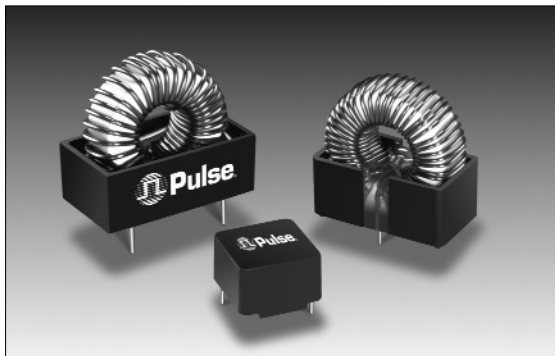





INDUCTORS DESIGNED FOR NATIONAL'S 50 kHz SIMPLE SWITCHER™



-  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 -30° to +130° C

| Part Identification | | Reference Operating Values ¹ | | | Design Control Values | | | |
|---------------------|---------------|---|------------------------|---------------------------|--|-------------|---------------|---------------|
| Part Number | Inductor Code | Inductance Typical (μH) | I _{DC} (Amps) | E _{TOP} (V-μSec) | Inductance No DC ² (μH ± 20%) | DCR (Ω MAX) | Package Style | Lead Diameter |
| PE-53112 | L47 | 47 | 3.0 | 90 | 38 | 0.05 | KM-2.0 | .025 |
| PE-92114K | L68 | 68 | 3.0 | 90 | 55 | 0.02 | KM-4.0 | .040 |
| PE-92108K | L100 | 100 | 3.0 | 90 | 91 | 0.04 | KM-4.0 | .032 |
| PE-53113 | L150 | 150 | 2.0 | 90 | 130 | 0.10 | KM-4.0 | .025 |
| PE-52626 | L220 | 220 | 1.4 | 90 | 230 | 0.38 | Low Profile | .025 SQ. |
| PE-53145 | L220 | 220 | 1.4 | 90 | 176 | 0.14 | KM-3.0 | .020 |
| PE-52627 | L330 | 330 | 0.9 | 90 | 302 | 0.74 | Low Profile | .025 SQ. |
| PE-53146 | L330 | 330 | 0.9 | 90 | 267 | 0.18 | KM-3.0 | .020 |
| PE-53114 | L470 | 470 | 0.64 | 90 | 426 | 0.16 | KM-4.0 | .025 |
| PE-52629 | L680 | 680 | .85 | 90 | 657 | 1.25 | Low Profile | .025 SQ. |
| PE-53115 | H150 | 150 | 3.0 | 200 | 136 | 0.10 | KM-4.0 | .025 |
| PE-53116 | H220 | 220 | 3.0 | 200 | 167 | 0.07 | KM-5.0 | .032 |
| PE-53117 | H330 | 330 | 3.0 | 200 | 292 | 0.15 | KM-5.0 | .025 |
| PE-53118 | H470 | 470 | 2.0 | 200 | 369 | 0.17 | KM-5.0 | .025 |
| PE-53119 | H680 | 680 | 1.3 | 200 | 562 | 0.20 | KM-5.0 | .025 |
| PE-53120 | H1000 | 1000 | 0.95 | 200 | 762 | 0.24 | KM-5.0 | .025 |
| PE-53121 | H1500 | 1500 | 0.62 | 200 | 1150 | 1.00 | Case | .032 |
| PE-53122 | H220 | 2200 | 0.42 | 200 | 1730 | 1.80 | Case | .032 |

NOTES:

1. Typical inductance occurs at the I_{DC} and E_{TOP} values shown.
2. The control value of inductance is measured at B_{OP} equal to or less than 10 gauss (10 mV @ 20 kHz) 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_{OP} or E_{TOP}.
5. SIMPLE SWITCHER™ is a trademark of National Semiconductor Corporation.

