



Inductors/Transformers Customizable, Surface Mount Torodial, Kool-Mu®, Powdered Iron and MPP Cores

**Note**

- Kool Mu® is a registered trademark of Spang & Company

FEATURES

- Toroidal design for minimal EMI radiation in DC/DC converter applications
- Designed to support the growing need for efficient DC/DC converters in battery operated equipment
- Two separate windings provide versatility by ability to connect windings in series or parallel
- Dielectric withstanding voltage: 500 V_{RMS}, 60 Hz, 5 s
- Operating temperature range: -40 °C to +125 °C
- Supplied on tape and reel and is designed to be pick and place compatible
- Custom versions and turns ratios available. Contact the factory with your specifications
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

| STANDARD ELECTRICAL SPECIFICATIONS (in parallel) | | | | | | |
|--|-------------------|-----------|---------------------------|------------|--------------------------------------|--|
| MODEL | STD. IND. (μH) | IND. TOL. | ACTUAL IND. (LOC) (μH) | DCR (Ω) | RATED I _{DC} (40 °C) (A) | IND. AT I _{DC} (L-BIAS) (30 %) |
| LPT4545ER1R0LK | 1.0 | ± 15 % | 0.832 | 0.003 | 6.90 | 0.51 at 7.62 |
| LPT4545ER1R5LK | 1.5 | ± 15 % | 1.30 | 0.004 | 6.45 | 0.80 at 6.10 |
| LPT4545ER2R5LK | 2.5 | ± 15 % | 2.55 | 0.006 | 5.75 | 1.57 at 4.35 |
| LPT4545ER3R3LK | 3.3 | ± 15 % | 3.33 | 0.007 | 5.50 | 2.05 at 3.81 |
| LPT4545ER5R0LK | 5.0 | ± 15 % | 5.20 | 0.011 | 4.45 | 3.20 at 3.05 |
| LPT4545ER100LK | 10 | ± 15 % | 10.2 | 0.019 | 3.45 | 6.28 at 2.18 |
| LPT4545ER150LK | 15 | ± 15 % | 15.0 | 0.029 | 2.79 | 9.26 at 1.79 |
| LPT4545ER200LK | 20 | ± 15 % | 20.8 | 0.038 | 2.61 | 12.4 at 1.53 |
| LPT4545ER250LK | 25 | ± 15 % | 25.2 | 0.048 | 2.25 | 15.5 at 1.39 |
| LPT4545ER330LK | 33 | ± 15 % | 32.5 | 0.068 | 1.85 | 20.0 at 1.22 |
| LPT4545ER500LK | 50 | ± 15 % | 50.0 | 0.107 | 1.50 | 30.8 at 0.98 |
| LPT4545ER101LK | 100 | ± 15 % | 101 | 0.195 | 1.15 | 62.0 at 0.69 |
| LPT4545ER151LK | 150 | ± 15 % | 152 | 0.302 | 0.92 | 93.4 at 0.56 |
| LPT4545ER251LK | 250 | ± 15 % | 248 | 0.491 | 0.73 | 153.0 at 0.44 |
| LPT4545ER301LK | 300 | ± 15 % | 300 | 0.670 | 0.63 | 179.0 at 0.40 |
| LPT4545ER331LK | 330 | ± 15 % | 333 | 0.706 | 0.60 | 205.0 at 0.38 |
| LPT4545ER1R0LP | 1.0 | ± 15 % | 0.838 | 0.004 | 6.61 | 0.53 at 7.09 |
| LPT4545ER1R5LP | 1.5 | ± 15 % | 1.21 | 0.005 | 6.08 | 0.76 at 5.91 |
| LPT4545ER2R5LP | 2.5 | ± 15 % | 2.71 | 0.009 | 5.01 | 1.71 at 3.94 |
| LPT4545ER3R3LP | 3.3 | ± 15 % | 3.35 | 0.012 | 4.22 | 2.11 at 3.54 |
| LPT4545ER5R0LP | 5.0 | ± 15 % | 5.66 | 0.019 | 3.32 | 3.57 at 2.73 |
| LPT4545ER100LP | 10 | ± 15 % | 10.9 | 0.034 | 2.52 | 6.84 at 1.97 |
| LPT4545ER150LP | 15 | ± 15 % | 14.8 | 0.049 | 2.10 | 9.31 at 1.69 |
| LPT4545ER250LP | 25 | ± 15 % | 26.3 | 0.084 | 1.61 | 16.5 at 1.27 |
| LPT4545ER330LP | 33 | ± 15 % | 34.3 | 0.119 | 1.34 | 21.6 at 1.11 |
| LPT4545ER500LP | 50 | ± 15 % | 51.0 | 0.180 | 1.09 | 32.1 at 0.91 |
| LPT4545ER101LP | 100 | ± 15 % | 105 | 0.342 | 0.81 | 66.2 at 0.63 |
| LPT4545ER151LP | 150 | ± 15 % | 150 | 0.509 | 0.66 | 94.7 at 0.53 |
| LPT4545ER251LP | 250 | ± 15 % | 248 | 0.831 | 0.52 | 156.0 at 0.41 |
| LPT4545ER331LP | 330 | ± 15 % | 335 | 1.194 | 0.43 | 211.0 at 0.35 |
| LPT4545ER1R0LM | 1.0 | ± 15 % | 0.838 | 0.004 | 7.54 | 0.54 at 11.11 |
| LPT4545ER1R5LM | 1.5 | ± 15 % | 1.30 | 0.004 | 6.82 | 0.84 at 8.89 |
| LPT4545ER2R5LM | 2.5 | ± 15 % | 2.55 | 0.007 | 5.84 | 1.64 at 6.35 |
| LPT4545ER3R3LM | 3.3 | ± 15 % | 3.33 | 0.008 | 5.49 | 2.14 at 5.56 |
| LPT4545ER5R0LM | 5.0 | ± 15 % | 5.20 | 0.012 | 4.37 | 3.35 at 4.45 |
| LPT4545ER100LM | 10 | ± 15 % | 10.2 | 0.022 | 3.32 | 6.56 at 3.18 |
| LPT4545ER150LM | 15 | ± 15 % | 15.0 | 0.033 | 2.69 | 9.68 at 2.61 |
| LPT4545ER250LM | 25 | ± 15 % | 25.2 | 0.054 | 2.12 | 16.2 at 2.02 |
| LPT4545ER330LM | 33 | ± 15 % | 32.5 | 0.076 | 1.76 | 20.9 at 1.78 |
| LPT4545ER500LM | 50 | ± 15 % | 50.0 | 0.119 | 1.41 | 32.2 at 1.43 |
| LPT4545ER101LM | 100 | ± 15 % | 101 | 0.219 | 1.07 | 64.8 at 1.01 |
| LPT4545ER151LM | 150 | ± 15 % | 152 | 0.340 | 0.86 | 97.7 at 0.82 |
| LPT4545ER251LM | 250 | ± 15 % | 248 | 0.551 | 0.67 | 159.0 at 0.64 |
| LPT4545ER331LM | 330 | ± 15 % | 333 | 0.788 | 0.56 | 214.0 at 0.56 |

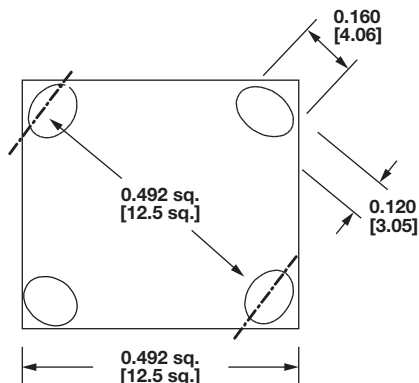
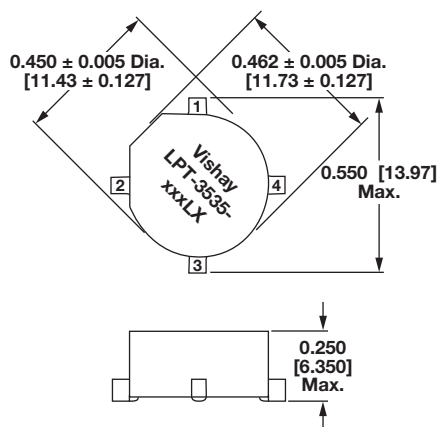
| DESCRIPTION | | | | | | |
|-------------|------|---------------------|-------------------------|---|---------------------------|-----------------------------------|
| LPT | 4545 | 100 μH | ± 15 % | A | ER | e2 |
| MODEL | SIZE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | CORE/HEIGHT K = KOOL MU® (A) P = POWDERED IRON (B) M = MPP (C) | PACKAGE CODE ER = reel | JEDEC® LEAD (Pb)-FREE STANDARD |

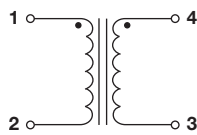
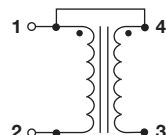
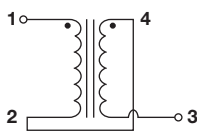
| GLOBAL PART NUMBER | | | | | | | | | |
|--------------------|---|---|------|---|--------------|---|------------------|---|------|
| L | P | T | 4 | 5 | 4 | 5 | E | R | 1 |
| PRODUCT FAMILY | | | SIZE | | PACKAGE CODE | | INDUCTANCE VALUE | | TOL. |
| | | | | | | | | | CORE |

Note

- Series is also available with SnPb terminations by using package code RH for tape and reel (in place of ER)

DIMENSIONS in inches [millimeters]

Pad Layout

Dimensional Outline

SCHEMATICS (connection diagrams)

Transformer

Parallel

Series

PART MARKING

- Vishay
- Model number
- Pin 1 identification

PACKAGING in inches [millimeters]

All embossed carrier tape packaging will be in compliance with the latest revision of EIA-481.

CARRIER TAPE WIDTH

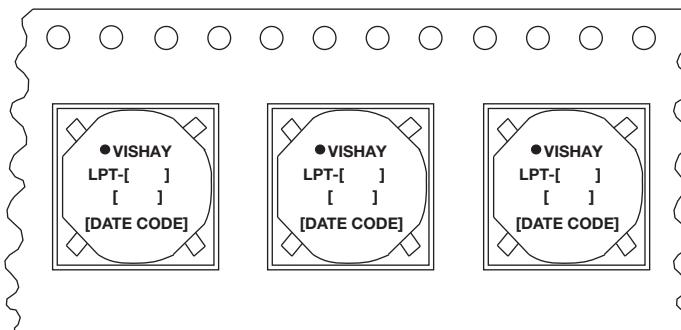
0.945 [24.0]

PITCH

0.630 [16.0]

PARTS PER 13" [330.2] REEL

600



REELING DIRECTION



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