

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
- 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
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition


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) | IND. AT I _{DC} (L-BIAS) (30 %) |
| LPT3535ER1ROLK | 1.0 | ± 15 % | 0.800 | 0.005 | 6.42 | 0.48 at 7.05 |
| LPT3535ER1R5LK | 1.5 | ± 15 % | 1.80 | 0.009 | 4.77 | 1.07 at 4.70 |
| LPT3535ER2R5LK | 2.5 | ± 15 % | 2.45 | 0.011 | 4.45 | 1.46 at 4.03 |
| LPT3535ER3R3LK | 3.3 | ± 15 % | 3.20 | 0.015 | 3.73 | 1.90 at 3.52 |
| LPT3535ER5ROLK | 5.0 | ± 15 % | 5.00 | 0.023 | 3.01 | 2.98 at 2.82 |
| LPT3535ER100LK | 10 | ± 15 % | 11.3 | 0.055 | 1.95 | 6.69 at 1.88 |
| LPT3535ER150LK | 15 | ± 15 % | 16.2 | 0.081 | 1.59 | 9.64 at 1.57 |
| LPT3535ER250LK | 25 | ± 15 % | 26.5 | 0.131 | 1.25 | 15.7 at 1.23 |
| LPT3535ER330LK | 33 | ± 15 % | 33.8 | 0.182 | 1.05 | 20.1 at 1.08 |
| LPT3535ER500LK | 50 | ± 15 % | 51.2 | 0.280 | 0.84 | 30.5 at 0.88 |
| LPT3535ER101LK | 100 | ± 15 % | 101 | 0.514 | 0.63 | 60.2 at 0.63 |
| LPT3535ER151LK | 150 | ± 15 % | 151 | 0.775 | 0.57 | 90.0 at 0.51 |
| LPT3535ER251LK | 250 | ± 15 % | 252 | 1.279 | 0.40 | 150.0 at 0.40 |
| LPT3535ER331LK | 330 | ± 15 % | 328 | 1.837 | 0.33 | 195.0 at 0.35 |
| LPT3535ER1ROLP | 1.0 | ± 15 % | 0.882 | 0.004 | 5.10 | 0.56 at 4.29 |
| LPT3535ER1R5LP | 1.5 | ± 15 % | 1.57 | 0.005 | 4.48 | 0.99 at 3.21 |
| LPT3535ER2R5LP | 2.5 | ± 15 % | 2.45 | 0.009 | 3.58 | 1.54 at 2.57 |
| LPT3535ER3R3LP | 3.3 | ± 15 % | 3.53 | 0.013 | 2.96 | 2.22 at 2.14 |
| LPT3535ER5ROLP | 5.0 | ± 15 % | 4.80 | 0.018 | 2.41 | 3.03 at 1.84 |
| LPT3535ER100LP | 10 | ± 15 % | 10.8 | 0.043 | 1.58 | 6.81 at 1.22 |
| LPT3535ER150LP | 15 | ± 15 % | 15.3 | 0.064 | 1.29 | 9.65 at 1.03 |
| LPT3535ER250LP | 25 | ± 15 % | 25.1 | 0.103 | 1.03 | 15.8 at 0.80 |
| LPT3535ER330LP | 33 | ± 15 % | 33.5 | 0.147 | 0.85 | 21.1 at 0.70 |
| LPT3535ER500LP | 50 | ± 15 % | 51.8 | 0.230 | 0.68 | 32.7 at 0.56 |
| LPT3535ER101LP | 100 | ± 15 % | 104 | 0.424 | 0.51 | 65.2 at 0.40 |
| LPT3535ER151LP | 150 | ± 15 % | 153 | 0.645 | 0.41 | 96.3 at 0.33 |
| LPT3535ER251LP | 250 | ± 15 % | 250 | 1.031 | 0.33 | 157.0 at 0.25 |
| LPT3535ER331LP | 330 | ± 15 % | 330 | 1.463 | 0.27 | 208.0 at 0.22 |
| LPT3535ER1ROLM | 1.0 | ± 15 % | 0.800 | 0.005 | 6.45 | 0.52 at 7.05 |
| LPT3535ER1R5LM | 1.5 | ± 15 % | 1.80 | 0.009 | 4.80 | 1.16 at 4.70 |
| LPT3535ER2R5LM | 2.5 | ± 15 % | 2.45 | 0.011 | 4.46 | 1.58 at 4.03 |
| LPT3535ER3R3LM | 3.3 | ± 15 % | 3.20 | 0.015 | 3.73 | 2.06 at 3.52 |
| LPT3535ER5ROLM | 5.0 | ± 15 % | 5.00 | 0.023 | 3.02 | 3.22 at 2.82 |
| LPT3535ER100LM | 10 | ± 15 % | 11.3 | 0.055 | 1.94 | 7.25 at 1.88 |
| LPT3535ER150LM | 15 | ± 15 % | 16.2 | 0.081 | 1.59 | 10.43 at 1.57 |
| LPT3535ER250LM | 25 | ± 15 % | 26.5 | 0.131 | 1.26 | 17.0 at 1.23 |
| LPT3535ER330LM | 33 | ± 15 % | 33.8 | 0.182 | 1.05 | 21.8 at 1.08 |
| LPT3535ER500LM | 50 | ± 15 % | 51.2 | 0.280 | 0.84 | 33.0 at 0.88 |
| LPT3535ER101LM | 100 | ± 15 % | 101 | 0.514 | 0.64 | 97.4 at 0.51 |
| LPT3535ER151LM | 150 | ± 15 % | 151 | 0.775 | 0.52 | 65.2 at 0.63 |
| LPT3535ER251LM | 250 | ± 15 % | 252 | 1.279 | 0.40 | 162.0 at 0.51 |
| LPT3535ER331LM | 330 | ± 15 % | 328 | 1.837 | 0.33 | 211.0 at 0.35 |

| DESCRIPTION | | | | | | |
|-------------|------|------------------|----------------------|---|--|-------------------------------|
| LPT | 3535 | 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 EB = Bulk | JEDEC LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER | | | | | | |
|--------------------|---|---|------|---|------------------|---|
| L | P | T | 3 | 5 | 3 | 5 |
| PRODUCT FAMILY | | | SIZE | | PACKAGE CODE | |
| | | | | | INDUCTANCE VALUE | |
| | | | | | TOL. | |
| | | | | | CORE | |

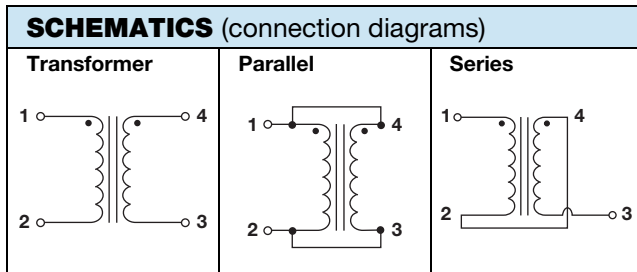
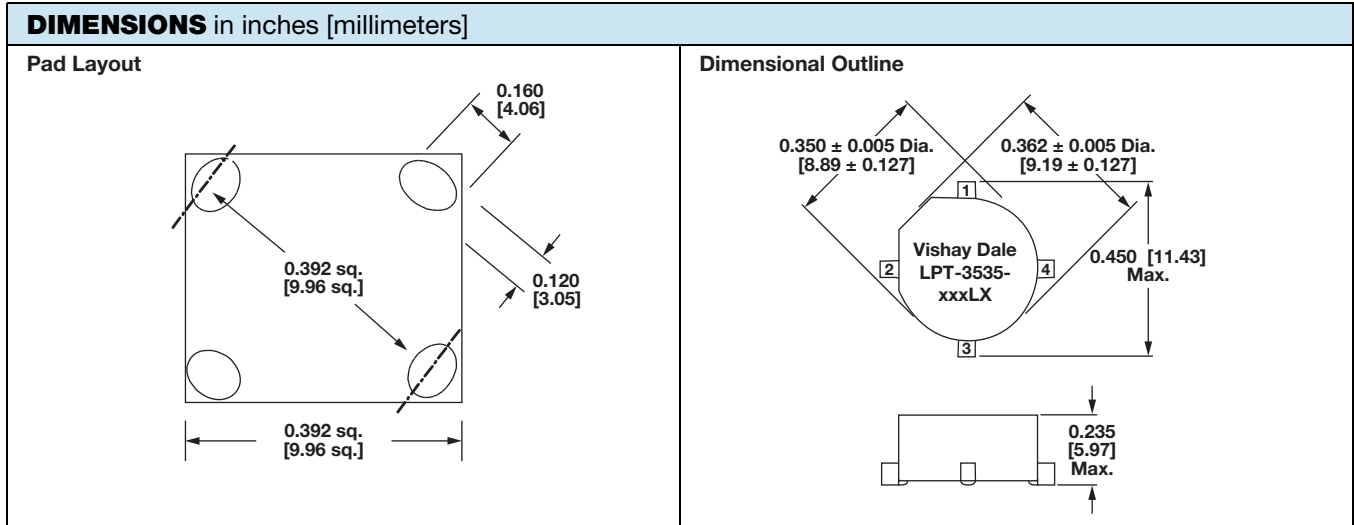
Note

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

LPT-3535

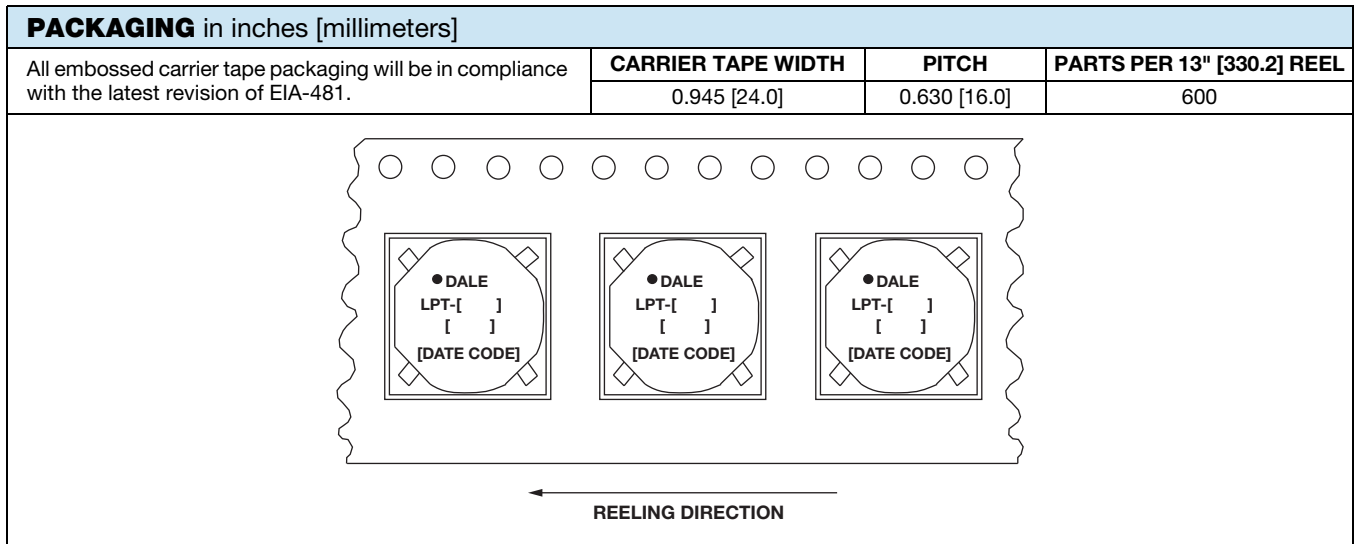
Vishay Dale

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



PART MARKING

- Vishay Dale
- Model number
- Pin 1 identification





Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.