

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) | IND. AT I _{DC} (L _{BIAS}) (30 %) | |
|----------------|----------------|-----------|------------------------|---------|-------------------------------|---|-------------------------------|
| LPT3535ER1R0LK | 1.0 | ± 15 % | 0.800 | 0.005 | 6.42 | 0.48 at 7.05 | Kool Mu [®] CORE (A) |
| 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 | |
| LPT3535ER5R0LK | 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 | |
| LPT3535ER1R0LP | 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 | |
| LPT3535ER5R0LP | 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 | |
| LPT3535ER1R0LM | 1.0 | ± 15 % | 0.800 | 0.005 | 6.45 | 0.52 at 7.05 | MPP (C) |
| 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 | |
| LPT3535ER5R0LM | 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 | |

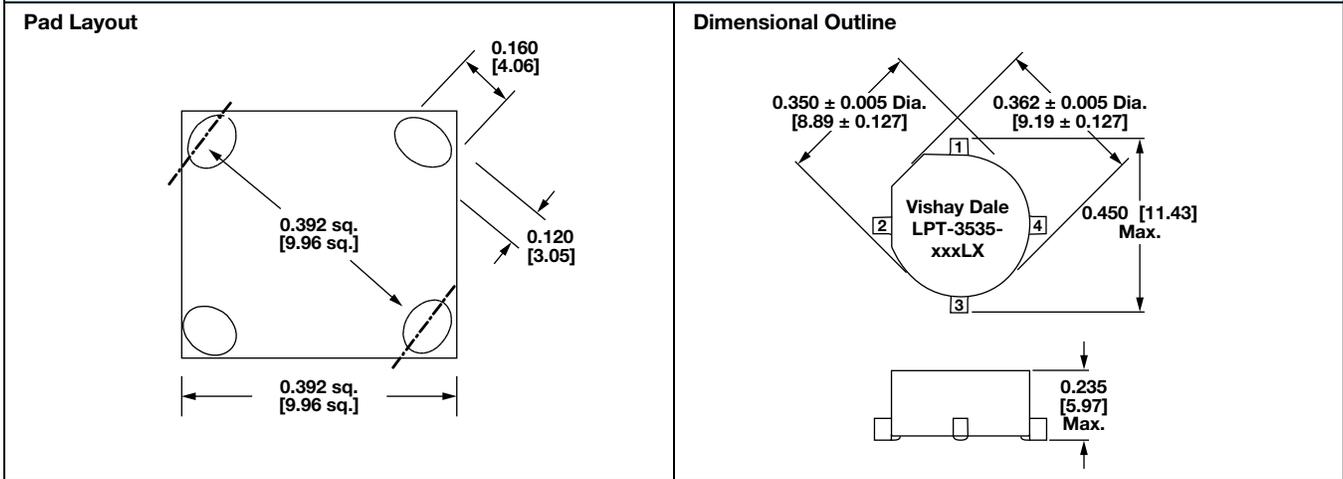
| DESCRIPTION | | | | | | |
|-------------|------|------------------|----------------------|---|--|-------------------------------|
| LPT | 3535 | 100 μH | ± 15 % | A | ER | e2 |
| MODEL | SIZE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | CORE/HEIGHT K = Kool Mu [®] (A) P = Powdered Iron (B) M = MPP (C) | PACKAGE CODE ER = Reel EB = Bulk | JEDEC LEAD (Pb)-FREE STANDARD |

| GLOBAL PART NUMBER | | | | | | | | | | | | | |
|--------------------|---|---|------|---|--------------|---|------------------|---|---|------|------|---|---|
| L | P | T | 3 | 5 | 3 | 5 | E | R | 1 | 0 | 1 | L | K |
| PRODUCT FAMILY | | | SIZE | | PACKAGE CODE | | INDUCTANCE VALUE | | | TOL. | CORE | | |

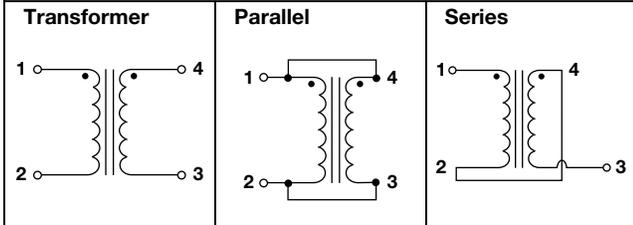
Note

- 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).

DIMENSIONS in inches [millimeters]



SCHEMATICS (connection diagrams)

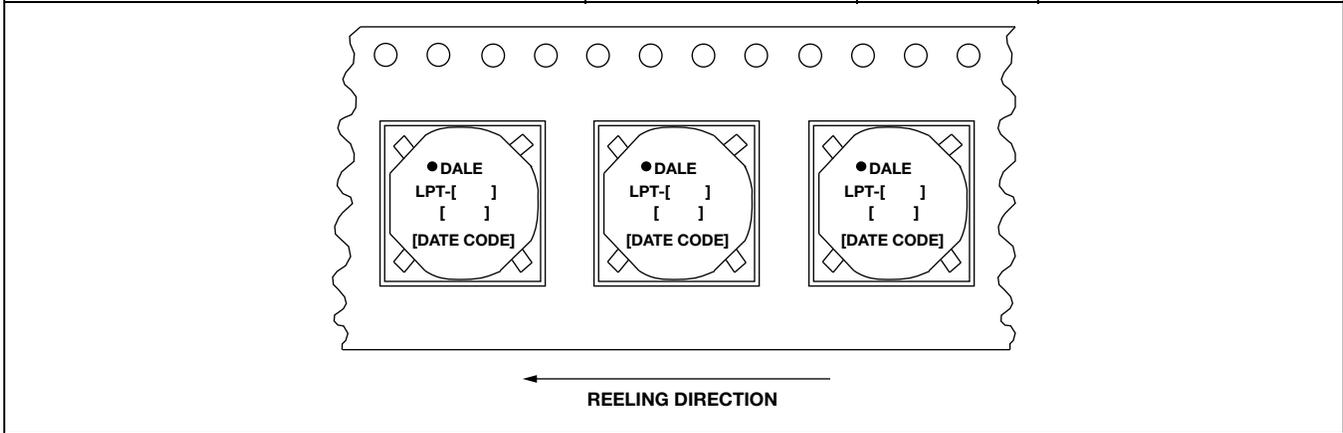


PART MARKING

- Vishay Dale
- 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 | PITCH | PARTS PER 13" [330.2] REEL |
| | 0.945 [24.0] | 0.630 [16.0] | 600 |





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