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

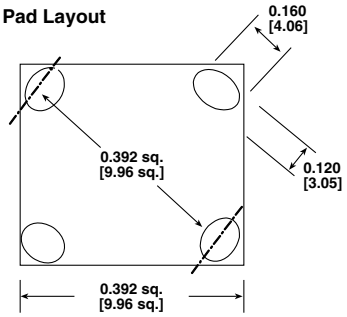
## FEATURES

- Toroidal design for minimal EMI radiation in DC to DC converter applications
- Designed to support the growing need for efficient DC to 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

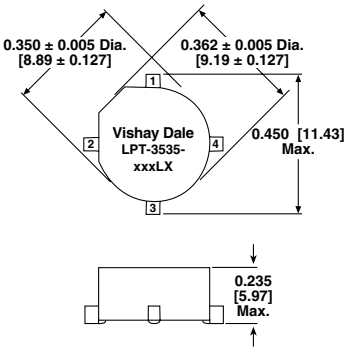
Pb-free
RoHS COMPLIANT

## DIMENSIONS in inches [millimeters]

**Pad Layout**




**Dimensional Outline**




## STANDARD ELECTRICAL SPECIFICATIONS

| MODEL LA = KOOL-MU® CORE | STANDARD IND. VALUES | ACTUAL IND. - µH (LOC) ± 15 % | RATED IDC (40 °C) | IND. AT IDC ($L_{BIAS}$) [30 %] | DCR Ω |
|---|---|---|---|---|---|
| LPT-3535-1R0LA | 1.0 | 0.800 | 6.42 | 0.48 at 7.05 | 0.005 |
| LPT-3535-1R5LA | 1.5 | 1.80 | 4.77 | 1.07 at 4.70 | 0.009 |
| LPT-3535-2R5LA | 2.5 | 2.45 | 4.45 | 1.46 at 4.03 | 0.011 |
| LPT-3535-3R3LA | 3.3 | 3.20 | 3.73 | 1.90 at 3.52 | 0.015 |
| LPT-3535-5R0LA | 5.0 | 5.00 | 3.01 | 2.98 at 2.82 | 0.023 |
| LPT-3535-100LA | 10 | 11.3 | 1.95 | 6.69 at 1.88 | 0.055 |
| LPT-3535-150LA | 15 | 16.2 | 1.59 | 9.64 at 1.57 | 0.081 |
| LPT-3535-250LA | 25 | 26.5 | 1.25 | 15.7 at 1.23 | 0.131 |
| LPT-3535-330LA | 33 | 33.8 | 1.05 | 20.1 at 1.08 | 0.182 |
| LPT-3535-500LA | 50 | 51.2 | 0.84 | 30.5 at 0.88 | 0.280 |
| LPT-3535-101LA | 100 | 101 | 0.63 | 60.2 at 0.63 | 0.514 |
| LPT-3535-151LA | 150 | 151 | 0.57 | 90.0 at 0.51 | 0.775 |
| LPT-3535-251LA | 250 | 252 | 0.40 | 150.0 at 0.40 | 1.279 |
| LPT-3535-331LA | 330 | 328 | 0.33 | 195.0 at 0.35 | 1.837 |
| **LB = POWDER IRON** | | | | | |
| LPT-3535-1R0LB | 1.0 | 0.882 | 5.10 | 0.56 at 4.29 | 0.004 |
| LPT-3535-1R5LB | 1.5 | 1.57 | 4.48 | 0.99 at 3.21 | 0.005 |
| LPT-3535-2R5LB | 2.5 | 2.45 | 3.58 | 1.54 at 2.57 | 0.009 |
| LPT-3535-3R3LB | 3.3 | 3.53 | 2.96 | 2.22 at 2.14 | 0.013 |
| LPT-3535-5R0LB | 5.0 | 4.80 | 2.41 | 3.03 at 1.84 | 0.018 |
| LPT-3535-100LB | 10 | 10.8 | 1.58 | 6.81 at 1.22 | 0.043 |
| LPT-3535-150LB | 15 | 15.3 | 1.29 | 9.65 at 1.03 | 0.064 |
| LPT-3535-250LB | 25 | 25.1 | 1.03 | 15.8 at 0.80 | 0.103 |
| LPT-3535-330LB | 33 | 33.5 | 0.85 | 21.1 at 0.70 | 0.147 |
| LPT-3535-500LB | 50 | 51.8 | 0.68 | 32.7 at 0.56 | 0.230 |
| LPT-3535-101LB | 100 | 104 | 0.51 | 65.2 at 0.40 | 0.424 |
| LPT-3535-151LB | 150 | 153 | 0.41 | 96.3 at 0.33 | 0.645 |
| LPT-3535-251LB | 250 | 250 | 0.33 | 157.0 at 0.25 | 1.031 |
| LPT-3535-331LB | 330 | 330 | 0.27 | 208.0 at 0.22 | 1.463 |
| **LC = MPP** | | | | | |
| LPT-3535-1R0LC | 1.0 | 0.800 | 6.45 | 0.52 at 7.05 | 0.005 |
| LPT-3535-1R5LC | 1.5 | 1.80 | 4.80 | 1.16 at 4.70 | 0.009 |
| LPT-3535-2R5LC | 2.5 | 2.45 | 4.46 | 1.58 at 4.03 | 0.011 |
| LPT-3535-3R3LC | 3.3 | 3.20 | 3.73 | 2.06 at 3.52 | 0.015 |
| LPT-3535-5R0LC | 5.0 | 5.00 | 3.02 | 3.22 at 2.82 | 0.023 |
| LPT-3535-100LC | 10 | 11.3 | 1.94 | 7.25 at 1.88 | 0.055 |
| LPT-3535-150LC | 15 | 16.2 | 1.59 | 10.43 at 1.57 | 0.081 |
| LPT-3535-250LC | 25 | 26.5 | 1.26 | 17.0 at 1.23 | 0.131 |
| LPT-3535-330LC | 33 | 33.8 | 1.05 | 21.8 at 1.08 | 0.182 |
| LPT-3535-500LC | 50 | 51.2 | 0.84 | 33.0 at 0.88 | 0.280 |
| LPT-3535-101LC | 100 | 101 | 0.64 | 97.4 at 0.51 | 0.514 |
| LPT-3535-151LC | 150 | 151 | 0.52 | 65.2 at 0.63 | 0.775 |
| LPT-3535-251LC | 250 | 252 | 0.40 | 162.0 at 0.51 | 1.279 |
| LPT-3535-331LC | 330 | 328 | 0.33 | 211.0 at 0.35 | 1.837 |

## DESCRIPTION

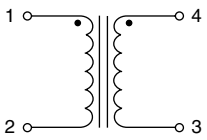
| LPT | 3535 | 100 µH | ± 15 % | LA/LB/LC | ER | e2 |
|---|---|---|---|---|---|---|
| MODEL | SIZE | INDUCTANCE VALUE | INDUCTANCE TOLERANCE | CORE/HEIGHT<br>LA = KOOL-MU®<br>LB = POWER IRON<br>LC = MPP | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

## GLOBAL PART NUMBER

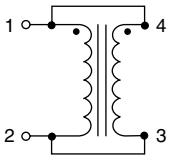
| L | P | T | 3 | 5 | 3 | 5 | E | R | 1 | 0 | 1 | L | K |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PRODUCT FAMILY | | | SIZE | | | | PACKAGE CODE | | INDUCTANCE VALUE | | | TOL. | CORE |

## SCHEMATICS - CONNECTION DIAGRAMS

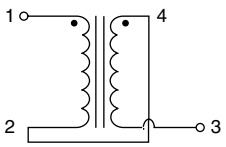
**Transformer**




**Parallel**




**Series**

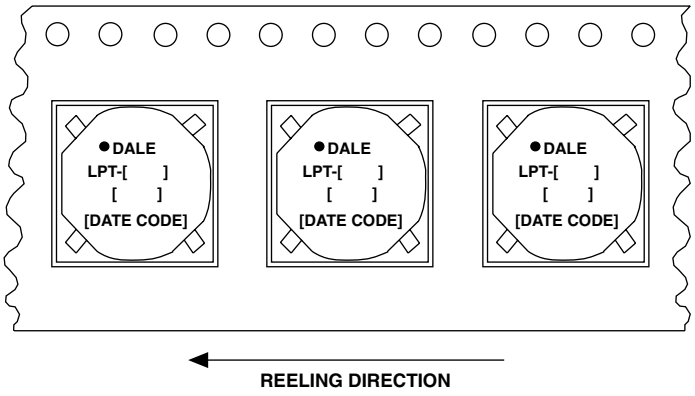



## PART MARKING

- Vishay Dale
- Model number
- Pin 1 identification

## PACKAGING in inches [millimeters]

**Pocket Tape Orientation**




| | |
|---|---|
| Carrier Tape Width | 0.945 [24.0] |
| Pitch | 0.630 [16.0] |
| Parts per 13" [330.2] Reel | 600 |

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

# Notice

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