

## TDH Series

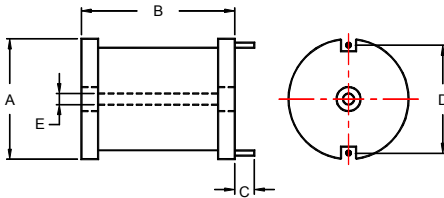


TDH Series is available in 120 standard values covering a wide range of inductance and current. The use of high saturation flux density material makes these coils ideal for use in switching regulated power supply application and wherever high current choke values in a small physical size are needed.

### Applications

- Switching Regulators
- Power Amplifiers
- Power Supplies
- SCR and Triac Controls
- Speaker Crossover Networks
- RFI Suppressions
- Filters

### Shapes and Dimensions



Dimension in mm

| Series | A                | B                | C    | D Typ. | E Typ. |
|--------|------------------|------------------|------|--------|--------|
| 1420T  | 17 <sup>+0</sup> | 22 <sup>+0</sup> | 15±2 | 12     | 3.0    |
| 1920T  | 22 <sup>+0</sup> | 22 <sup>+0</sup> | 15±2 | 15     | 4.0    |
| 2420T  | 28 <sup>+0</sup> | 22 <sup>+0</sup> | 15±2 | 22     | 4.0    |

- Note: lead-free
- CHILISIN uses UL tube on TDH Series to avoid the damage when wave soldering..
- Customized specifications are welcome.

### Electrical Characteristics

| L&%<br>CODE | Inductance<br>(μH) | TDH1420T-L&%-N |                | TDH1920T-L&%-N |                | TDH2420T-L&%-N |                |
|-------------|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|
|             |                    | DCR<br>(Ω) Max | IDC<br>(A) Max | DCR<br>(Ω) Max | IDC<br>(A) Max | DCR<br>(Ω) Max | IDC<br>(A) Max |
| 1R0M        | 1.0                | 0.003          | 9.0            | 0.003          | 11.4           | 0.003          | 21             |
| 1R2M        | 1.2                | 0.003          | 9.0            | 0.003          | 11.4           | 0.003          | 21             |
| 1R5M        | 1.5                | 0.004          | 9.0            | 0.003          | 11.4           | 0.003          | 21             |
| 1R8M        | 1.8                | 0.004          | 9.0            | 0.003          | 11.4           | 0.003          | 21             |
| 2R2M        | 2.2                | 0.005          | 9.0            | 0.004          | 11.4           | 0.003          | 21             |
| 2R7M        | 2.7                | 0.005          | 9.0            | 0.005          | 11.4           | 0.003          | 21             |
| 3R3M        | 3.3                | 0.005          | 9.0            | 0.005          | 11.4           | 0.003          | 21             |
| 3R9M        | 3.9                | 0.006          | 9.0            | 0.005          | 11.4           | 0.003          | 21             |
| 4R7M        | 4.7                | 0.007          | 9.0            | 0.005          | 11.4           | 0.003          | 21             |
| 5R6M        | 5.6                | 0.007          | 9.0            | 0.006          | 11.4           | 0.003          | 21             |
| 6R8M        | 6.8                | 0.008          | 9.0            | 0.007          | 11.4           | 0.004          | 21             |
| 8R2M        | 8.2                | 0.009          | 9.0            | 0.007          | 11.4           | 0.004          | 21             |
| 100M        | 10                 | 0.010          | 9.0            | 0.009          | 11.4           | 0.006          | 17             |
| 120K        | 12                 | 0.011          | 9.0            | 0.009          | 11.4           | 0.008          | 13.5           |
| 150K        | 15                 | 0.015          | 7.2            | 0.013          | 9.0            | 0.009          | 13.5           |
| 180K        | 18                 | 0.016          | 7.2            | 0.018          | 7.2            | 0.010          | 13.5           |
| 220K        | 22                 | 0.025          | 5.5            | 0.019          | 7.2            | 0.011          | 13.5           |
| 270K        | 27                 | 0.030          | 4.5            | 0.026          | 5.5            | 0.012          | 13.5           |
| 330K        | 33                 | 0.040          | 4.0            | 0.029          | 5.5            | 0.017          | 13.5           |
| 390K        | 39                 | 0.046          | 4.0            | 0.030          | 5.5            | 0.022          | 11.4           |
| 470K        | 47                 | 0.062          | 2.8            | 0.035          | 5.5            | 0.024          | 9.0            |
| 560K        | 56                 | 0.069          | 2.8            | 0.039          | 5.5            | 0.026          | 9.0            |
| 680K        | 68                 | 0.077          | 2.8            | 0.053          | 4.8            | 0.029          | 9.0            |
| 820K        | 82                 | 0.083          | 2.8            | 0.060          | 4.8            | 0.032          | 9.0            |
| 101K        | 100                | 0.095          | 2.8            | 0.080          | 4.0            | 0.034          | 9.0            |
| 121K        | 120                | 0.127          | 2.0            | 0.090          | 4.0            | 0.046          | 7.2            |
| 151K        | 150                | 0.181          | 1.6            | 0.098          | 4.0            | 0.064          | 5.5            |
| 181K        | 180                | 0.217          | 1.6            | 0.110          | 4.0            | 0.072          | 5.5            |
| 221K        | 220                | 0.240          | 1.6            | 0.150          | 2.8            | 0.080          | 5.5            |
| 271K        | 270                | 0.300          | 1.6            | 0.213          | 2.0            | 0.110          | 4.5            |
| 331K        | 330                | 0.336          | 1.3            | 0.305          | 1.6            | 0.122          | 4.5            |
| 391K        | 390                | 0.460          | 1.0            | 0.320          | 1.6            | 0.169          | 4.0            |
| 471K        | 470                | 0.636          | 0.8            | 0.355          | 1.6            | 0.187          | 4.0            |
| 561K        | 560                | 0.696          | 0.8            | 0.388          | 1.6            | 0.205          | 4.0            |
| 681K        | 680                |                |                | 0.430          | 1.6            | 0.256          | 2.8            |
| 821K        | 820                |                |                | 0.590          | 1.3            | 0.288          | 2.8            |
| 102K        | 1000               |                |                | 0.818          | 1.0            | 0.426          | 2.0            |
| 122K        | 1200               |                |                | 1.140          | 0.8            | 0.462          | 2.0            |
| 152K        | 1500               |                |                | 1.260          | 0.8            | 0.518          | 2.0            |
| 182K        | 1800               |                |                | 1.390          | 0.8            | 0.705          | 1.6            |
| 222K        | 2200               |                |                | 1.540          | 0.8            | 1.020          | 1.3            |
| 272K        | 2700               |                |                |                |                | 1.140          | 1.3            |
| 332K        | 3300               |                |                |                |                | 1.270          | 1.3            |
| 392K        | 3900               |                |                |                |                | 1.670          | 1.0            |
| 472K        | 4700               |                |                |                |                | 1.860          | 1.0            |

1. Inductance drop = 10% Max at IDC
2. Inductance @ 1KHz, 1V
3. Tolerance K = ±10% >10μH, M = ±20% ≤ 10μH
3. Non-listed values available on request
4. Coils finished with sleeving UL-VW-1 rated
5. Center hole for mechanical mounting
6. 1000V AC RMS hi pot
7. Spacer available at additional cost to facilitate PC board washing
8. Operating Temperature: -25°C to + 85°C
9. Temperature Rise: 50°C Max at IDC.