

Molded Inductors, Axial Leads, High Frequency and Noise Suppression Applications



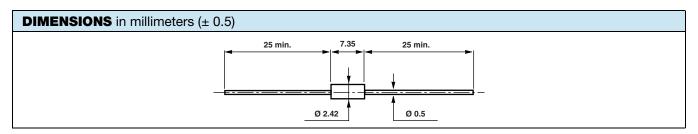
FEATURES

- Accurate dimensions
- Superior moisture protection



 Material categorization: For definitions of compliance please see <u>www.vishay.com/doc?99912</u>

The inductors have copper winding on magnetic core structure.



| STANDARD ELECT | TRICAL SPECIFICAT | IONS | | |
|----------------|---------------------------|---------------------------------------|---|---------------------------------|
| MODEL | INDUCTANCE RANGE µH | RATED POWER P _{70°C} W | LIMITING ELEMENT VOLTAGE V _{RMS} | TOLERANCE ⁽¹⁾ ± % |
| TR021 | 0.022 to 1500 | 0.180 | 500 | 10 |

Note

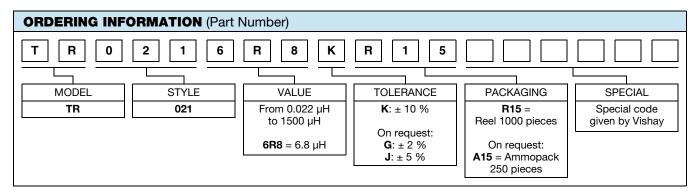
 $^{(1)}~\pm$ 10 % for 0.022 $\mu H < L \leq$ 1500 μH . On request: \pm 5 % and \pm 2 % for 1 $\mu H < L \leq$ 1000 μH

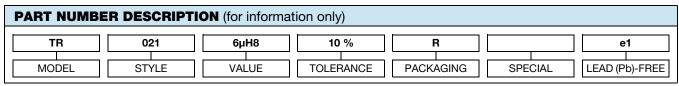
| MECHANICAL SPECIFICATIONS | | | |
|---------------------------|--------------|--|--|
| Coating | Molded epoxy | | |
| Weight | 0.5 g | | |

| ENVIRONMENTAL SPECIFICATIONS | | | | |
|------------------------------|----------------|--|--|--|
| Operating temperature range | + 70 °C | | | |
| Temperature limits | 55 °C + 125 °C | | | |

| PACKAGING |
|--|
| Standard: In tape and reel of 1000 pieces, code R15 (R) |
| On request: 250 pieces tane in hoy "ammonack" code A15 (R) |

| MARKING |
|--|
| Standard: |
| Print marked-manufacturer, inductance value, tolerance |







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| NDUCTANCE VALUE | TOLERANCE | Q MIN. | TEST FREQUENCY | RESISTANCE MAX. | SRF MIN. | I MAX. |
|--------------------|------------------|-----------|-------------------|--------------------|-------------|-----------|
| μH | % | IVIIIN. | MHz | Ω | MHz | mA |
| 0.022 | ± 10 % | 35 | 50 | 0.028 | 650 | 2530 |
| 0.027 | ± 10 % | 35 | 50 | 0.030 | 650 | 2450 |
| 0.033 | ± 10 % | 35 | 50 | 0.035 | 650 | 2270 |
| 0.039 | ± 10 % | 35 | 50 | 0.035 | 650 | 2270 |
| 0.047 | ± 10 % | 35 | 50 | 0.04 | 650 | 2120 |
| 0.056 | ± 10 % | 35 | 50 | 0.05 | 650 | 1900 |
| 0.068 | ± 10 % | 35 | 50 | 0.06 | 650 | 1730 |
| 0.082 | ± 10 % | 35 | 50 | 0.07 | 650 | 1620 |
| 0.10 | ± 10 % | 30 | 25 | 80.0 | 650 | 1500 |
| 0.12 | ± 10 % | 30 | 25 | 0.09 | 620 | 1410 |
| 0.15 | ± 10 % | 30 | 25 | 0.10 | 600 | 1340 |
| 0.18 | ± 10 % | 30 | 25 | 0.12 | 550 | 1225 |
| 0.22 | ± 10 % | 30 | 25 | 0.14 | 510 | 1130 |
| 0.27 | ± 10 % | 30 | 25 | 0.16 | 430 | 1060 |
| 0.33 | ± 10 % | 30 | 25 | 0.20 | 410 | 945 |
| 0.39 | ± 10 % | 30 | 25 | 0.30 | 380 | 775 |
| 0.47 | ± 10 % | 30 | 25 | 0.38 | 340 | 690 |
| 0.56 | ± 10 % | 30 | 25 | 0.50 | 300 | 600 |
| 0.68 | ± 10 % | 30 | 25 | 0.60 | 275 | 550 |
| 0.82 | ± 10 % | 30 | 25 | 0.75 | 250 | 490 |
| 1 | ± 10 % | 30 | 25 | 0.90 | 230 | 445 |
| 1.2 | ± 10 % | 25 | 7.9 | 0.18 | 150 | 1000 |
| 1.5 | ± 10 % | 25 | 7.9 | 0.22 | 140 | 905 |
| 1.8 | ± 10 % | 25 | 7.9 | 0.30 | 125 | 775 |
| 2.2 | ± 10 % | 25 | 7.9 | 0.40 | 115 | 670 |
| 2.7 | ± 10 % | 30 | 7.9 | 0.50 | 100 | 600 |
| 3.3 | ± 10 % | 35 | 7.9 | 0.80 | 90 | 475 |
| 3.9 | ± 10 % | 35 | 7.9 | 1 | 82 | 425 |
| 4.7 | ± 10 % | 35 | 7.9 | 1.2 | 75 | 385 |
| 5.6 | ± 10 % | 35 | 7.9 | 1.8 | 68 | 330 |
| 6.8 | ± 10 % | 40 | 7.9 | 1.8 | 60 | 330 |
| 8.2 | ± 10 % | 40 | 7.9 | 2.55 | 55 | 265 |
| 10 | ± 10 % | 40 | 7.9 | 2.9 | 50 | 245 |
| 12 | ± 10 % | 35 | 2.5 | 1.9 | 45 | 305 |
| 15 | ± 10 % | 40 | 2.5 | 2.8 | 45 | 250 |
| 18 | ± 10 % | 40 | 2.5 | 3.1 | 40 | 240 |
| 22 | ± 10 % | 40 | 2.5 | 3.3 | 40 | 230 |
| 27 | ± 10 % | 40 | 2.5 | 3.9 | 30 | 215 |
| 33 | ± 10 % | 40 | 2.5 | 4 | 24 | 210 |
| 39 | ± 10 % | 40 | 2.5 | 4.4 | 22 | 200 |
| 47 | ± 10 % | 40 | 2.5 | 5 | 20 | 190 |
| 56 | ± 10 % | 40 | 2.5 | 5.3 | 18 | 180 |
| 68 | ± 10 % | 40 | 2.5 | 6.1 | 15 | 170 |
| 82 | ± 10 % | 40 | 2.5 | 6.9 | 14 | 160 |
| 100 | ± 10 % | 40 | 2.5 | 7.7 | 11.5 | 150 |
| 120 | ± 10 % | 35 | 0.79 | 9.9 | 9.5 | 135 |
| 150 | ± 10 % | 35 | 0.79 | 11 | 8.5 | 120 |
| 180 | ± 10 % | 25 | 0.79 | 18 | 8 | 100 |
| 220 | ± 10 % | 25 | 0.79 | 21 | 7.2 | 90 |
| 270 | ± 10 % | 25 | 0.79 | 25 | 6.4 | 85 |
| 330 | ± 10 % | 25 | 0.79 | 34 | 5.6 | 70 |
| 390 | ± 10 % | 25 | 0.79 | 42 | 4.5 | 65 |
| 470 | ± 10 % | 25 | 0.79 | 46 | 4.2 | 60 |
| 560 | ± 10 % | 25 | 0.79 | 52 | 3.5 | 55 |
| 680 | ± 10 % | 25 | 0.79 | 55 | 3.3 | 55 |
| 820 | ± 10 % | 25 | 0.79 | 62 | 3 | 50 |
| 1000 | ± 10 % ± 10 % | 25 15 | 0.79 0.25 | 67 | 2.5 | 50 |
| 1200 | | 4 - | 0.05 | 74 | 1.6 | 45 |



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