

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



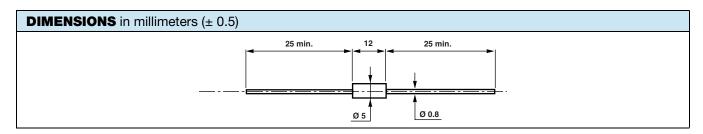
FEATURES

- · Accurate dimensions
- · Superior moisture protection



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

These inductors have copper winding on magnetic core structure.



| STANDARD ELECTRICAL SPECIFICATIONS | | | | | | |
|------------------------------------|---------------------------|--|---|----------------------|----------|------------------|
| MODEL | INDUCTANCE RANGE µH | RATED POWER P ₇₀ °c W | LIMITING ELEMENT VOLTAGE V _{RMS} | TOLERANCE (1) ± % | Q RANGE | I RANGE mA |
| TR023 | 0.15 to 1000 | 0.300 | 500 | 10 | 20 to 50 | 120 to 3160 |

Note

 $^{(1)}~\pm$ 10 % for 0.15 $\mu H < L \le$ 1000 μH . On request: \pm 5 % and \pm 2 % for 1 $\mu H < L \le$ 1000 μH

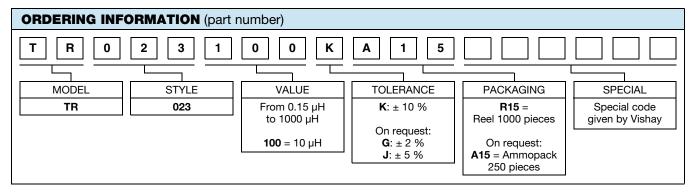
| MECHANICAL SPECIFICATIONS | | | | |
|---------------------------|--------------|--|--|--|
| Coating | Molded epoxy | | | |
| Weight | 1.3 g | | | |

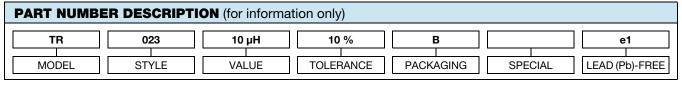
| ENVIRONMENTAL SPECIFICATIONS | | | | |
|------------------------------|------------------|--|--|--|
| Operating temperature range | + 70 °C | | | |
| Temperature limits | - 55 °C + 125 °C | | | |

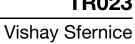
PACKAGING Standard: Tape and reel 1000 pieces, code R15 (R)

Standard: Tape and reel 1000 pieces, code R15 (R)
On request: 250 pieces tape in box "ammopack", code A15 (B)

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









| STANDARD VALUES | | | | | | |
|---------------------------|-------------|-----------|--------------------------|--------------------------|--------------------|-----------------|
| INDUCTANCE VALUE µH | TOLERANCE % | Q MIN. | TEST FREQUENCY MHz | RESISTANCE MAX. Ω | SRF MIN. MHz | I MAX. mA |
| 0.15 | ± 10 | 40 | 25 | 0.030 | 500 | 3160 |
| 0.18 | ± 10 | 40 | 25 | 0.032 | 410 | 3060 |
| 0.22 | ± 10 | 40 | 25 | 0.035 | 400 | 2920 |
| 0.27 | ± 10 | 40 | 25 | 0.050 | 380 | 2440 |
| 0.33 | ± 10 | 40 | 25 | 0.065 | 340 | 2150 |
| 0.39 | ± 10 | 40 | 25 | 0.075 | 320 | 2000 |
| 0.47 | ± 10 | 40 | 25 | 0.085 | 300 | 1870 |
| 0.56 | ± 10 | 40 | 25 | 0.14 | 250 | 1470 |
| 0.68 | ± 10 | 40 | 25 | 0.15 | 230 | 1415 |
| 0.82 | ± 10 | 35 | 25 | 0.22 | 220 | 1165 |
| 1 | ± 10 | 35 | 25 | 0.30 | 190 | 1000 |
| 1.2 | ± 10 | 20 | 7.9 | 0.40 | 180 | 870 |
| 1.5 | ± 10 | 20 | 7.9 | 0.42 | 170 | 850 |
| 1.8 | ± 10 | 20 | 7.9 | 0.65 | 150 | 680 |
| 2.2 | ± 10 | 20 | 7.9 | 0.79 | 135 | 620 |
| 2.7 | ± 10 | 20 | 7.9 | 1.20 | 120 | 500 |
| 3.3 | ± 10 | 25 | 7.9 | 0.14 | 75 | 1465 |
| 3.9 | ± 10 | 25 | 7.9 | 0.15 | 55 | 1415 |
| 4.7 | ± 10 | 25 | 7.9 | 0.21 | 50 | 1200 |
| 5.6 | ± 10 | 25 | 7.9 | 0.28 | 50 | 1035 |
| 6.8 | ± 10 | 25 | 7.9 | 0.37 | 50 | 900 |
| 8.2 | ± 10 | 25 | 7.9 | 0.44 | 45 | 825 |
| 10 | ± 10 | 25 | 7.9 | 0.60 | 33 | 700 |
| 12 | ± 10 | 40 | 2.5 | 1 | 33 | 545 |
| 15 | ± 10 | 35 | 2.5 | 1.30 | 30 | 480 |
| 18 | ± 10 | 50 | 2.5 | 1.10 | 35 | 510 |
| 22 | ± 10 | 50 | 2.5 | 1.20 | 30 | 500 |
| 27 | ± 10 | 50 | 2.5 | 1.30 | 22 | 480 |
| 33 | ± 10 | 50 | 2.5 | 1.50 | 20 | 430 |
| 39 | ± 10 | 50 | 2.5 | 1.70 | 18 | 420 |
| 47 | ± 10 | 50 | 2.5 | 2.10 | 17 | 375 |
| 56 | ± 10 | 50 | 2.5 | 2.35 | 14 | 355 |
| 68 | ± 10 | 50 | 2.5 | 2.80 | 12 | 325 |
| 82 | ± 10 | 50 | 2.5 | 3.30 | 11 | 300 |
| 100 | ± 10 | 50 | 2.5 | 3.60 | 10 | 285 |
| 120 | ± 10 | 50 | 0.79 | 5 | 6.5 | 245 |
| 150 | ± 10 | 50 | 0.79 | 6.1 | 5.5 | 220 |
| 180 | ± 10 | 50 | 0.79 | 7.5 | 5.5 | 200 |
| 220 | ± 10 | 50 | 0.79 | 8.4 | 5.5 | 185 |
| 270 | ± 10 | 50 | 0.79 | 9 | 5 | 180 |
| 330 | ± 10 | 50 | 0.79 | 10 | 4.5 | 170 |
| 390 | ± 10 | 50 | 0.79 | 11 | 4.3 | 165 |
| 470 | ± 10 | 50 | 0.79 | 12 | 4 | 155 |
| 560 | ± 10 | 50 | 0.79 | 13 | 3.5 | 150 |
| 680 | ± 10 | 50 | 0.79 | 14 | 3.3 | 145 |
| 820 | ± 10 | 50 | 0.79 | 16 | 3 | 135 |
| 1000 | ± 10 | 50 | 0.79 | 17 | 2.6 | 120 |



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Vishay

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