

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

#### **FEATURES**



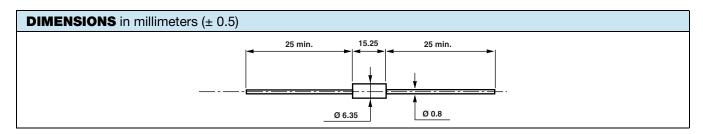


· Accurate dimensions

· Superior moisture protection

• Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

These inductors have copper winding on magnetic core structure.



| STANDARD ELECTRICAL SPECIFICATIONS |                           |  |   |                      |          |                  |
|------------------------------------|---------------------------|--|---|----------------------|----------|------------------|
| MODEL                              | INDUCTANCE<br>RANGE<br>µH | RATED POWER<br>P <sub>70</sub> °C<br>W | LIMITING ELEMENT VOLTAGE V <sub>RMS</sub> | TOLERANCE (1)<br>± % | Q RANGE  | I<br>RANGE<br>mA |
| TR025                              | 1 to 8200                 | 0.500                                  | 500                                       | 10                   | 25 to 85 | 80 to 1960       |

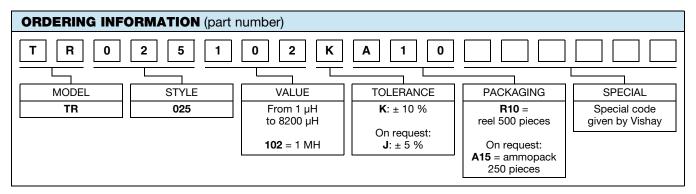
 $^{(1)}$  ± 10 % for 1  $\mu$ H < L  $\leq$  8200  $\mu$ H . On request: ± 5 % for 1  $\mu$ H < L  $\leq$  1000  $\mu$ H

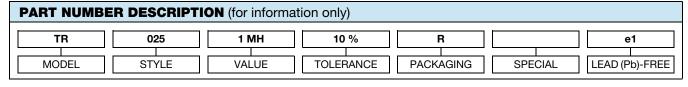
| MECHANICAL SPECIF | IANICAL SPECIFICATIONS |  |  |  |
|-------------------|------------------------|--|--|--|
| Coating           | Molded epoxy           |  |  |  |
| Weight            | 2.7 g                  |  |  |  |

| ENVIRONMENTAL SPI           | ECIFICATIONS      |
|-----------------------------|-------------------|
| Operating temperature range | 0 °C to +70 °C    |
| Temperature limits          | -55 °C to +125 °C |

| PACKAGING   |
|---|
| Standard: tape and reel 500 pieces, code R10 (R)            |
| On request: 250 pieces tape in box "ammopack", code A15 (B) |

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







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| STANDARD \ |                |           | TEST             | RESISTANCE | SRF         |            |
|------------|----------------|-----------|------------------|------------|-------------|------------|
| VALUE      | TOLERANCE<br>% | Q<br>MIN. | FREQUENCY<br>MHz | MAX.<br>Ω  | MIN.<br>MHz | MAX.<br>mA |
| μH<br>1    | ± 10           | 55        | 25               | 0.14       | 200         | 1900       |
| 1.2        | ± 10           | 30        | 7.9              | 0.14       | 180         | 1640       |
| 1.5        | ± 10           | 30        | 7.9              | 0.19       | 160         | 1340       |
| 1.8        | ± 10           | 30        | 7.9              | 0.28       | 150         | 1160       |
| 2.2        | ± 10           | 30        | 7.9              | 0.50       | 135         | 1000       |
| 2.7        | ± 10           | 30        | 7.9              | 0.65       | 120         | 875        |
| 3.3        | ± 10           | 30        | 7.9              | 0.03       | 105         | 710        |
| 3.9        | ± 10           | 30        | 7.9              | 1.2        | 100         | 645        |
| 4.7        | ± 10           | 30        | 7.9              | 1.8        | 90          | 530        |
| 5.6        | ± 10           | 25        | 7.9              | 0.13       | 55          | 1960       |
| 6.8        | ± 10           | 25        | 7.9              | 0.13       | 50          | 1580       |
| 8.2        | ± 10           | 25        | 7.9              | 0.20       | 44          | 1510       |
| 10         | ± 10           | 25        | 7.9              | 0.26       | 42          | 1380       |
| 10         | ± 10           | 35        | 2.5              | 0.26       | 34          | 1060       |
| 15         | ± 10           | 35<br>35  | 2.5              | 0.45       | 32          | 980        |
| 18         |                | 40        | 2.5              | 0.52       | 28          | 840        |
| 22         | ± 10           |           | 2.5              | 0.70       | -           | 705        |
|            | ± 10           | 50        |                  |            | 24          |            |
| 27         | ± 10           | 50        | 2.5              | 1.3        | 22          | 620        |
| 33         | ± 10           | 50        | 2.5              | 1.5        | 20          | 575        |
| 39         | ± 10           | 60        | 2.5              | 2          | 16          | 500        |
| 47         | ± 10           | 85        | 2.5              | 2.2        | 18          | 475        |
| 56         | ± 10           | 85        | 2.5              | 2.3        | 16          | 465        |
| 68         | ± 10           | 85        | 2.5              | 3          | 14          | 405        |
| 82         | ± 10           | 85        | 2.5              | 3.5        | 12.5        | 375        |
| 100        | ± 10           | 80        | 2.5              | 3.8        | 11          | 365        |
| 120        | ± 10           | 75        | 0.79             | 4.2        | 10          | 345        |
| 150        | ± 10           | 60        | 0.79             | 5          | 8.3         | 315        |
| 180        | ± 10           | 65        | 0.79             | 5.3        | 6           | 305        |
| 220        | ± 10           | 65        | 0.79             | 5.9        | 5.5         | 290        |
| 270        | ± 10           | 65        | 0.79             | 6.6        | 5           | 275        |
| 330        | ± 10           | 60        | 0.79             | 7.2        | 4.2         | 260        |
| 390        | ± 10           | 60        | 0.79             | 8.6        | 3.9         | 240        |
| 470        | ± 10           | 65        | 0.79             | 9          | 3.6         | 235        |
| 560        | ± 10           | 65        | 0.79             | 9.7        | 3.4         | 225        |
| 680        | ± 10           | 60        | 0.79             | 10         | 3.1         | 220        |
| 820        | ± 10           | 60        | 0.79             | 12         | 2.6         | 200        |
| 1000       | ± 10           | 60        | 0.79             | 15         | 2.6         | 180        |
| 1200       | ± 10           | 50        | 0.25             | 18         | 2.3         | 165        |
| 1500       | ± 10           | 60        | 0.25             | 21         | 2.1         | 150        |
| 1800       | ± 10           | 60        | 0.25             | 23         | 2           | 145        |
| 2200       | ± 10           | 60        | 0.25             | 26         | 1.7         | 135        |
| 2700       | ± 10           | 60        | 0.25             | 33         | 1.7         | 120        |
| 3300       | ± 10           | 55        | 0.25             | 39         | 1.2         | 110        |
| 3900       | ± 10           | 55        | 0.25             | 44         | 1           | 105        |
| 4700       | ± 10           | 55        | 0.25             | 64         | 0.9         | 85         |
| 5600       | ± 10           | 55        | 0.25             | 66         | 0.85        | 85         |
| 6800       | ± 10           | 50        | 0.25             | 70         | 0.80        | 82         |
| 8200       | ± 10           | 60        | 0.25             | 72         | 0.75        | 80         |



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