

**▶ Product Introduction**

**Token develops high-efficiency coiled power inductors with large current and low DCR.**

**Features :**

- Large Current and Low DCR.

**Applications :**

- Mother Board of PC.
- Mother Board of Notebook.

Token Develops High-Efficiency Coiled Power Inductors with Large Current and Low DCR. Token has announced a wire-wound power inductor designed for use in the Mother Board of PC and Notebook and various other power devices. The TC1213, measures only 14.0 × 14.5 mm, with a maximum height of 9.5 mm.

Most conventional DC-DC converters use inductors with cores made of relatively expensive metallic materials. By contrast, this product, with a ferrite material, realizes the same DC bias characteristics and other performance features as same-size inductors made with more expensive materials. The TC1213 offers customers much greater design freedom with large current and low DCR by meeting the need to replace power inductors.

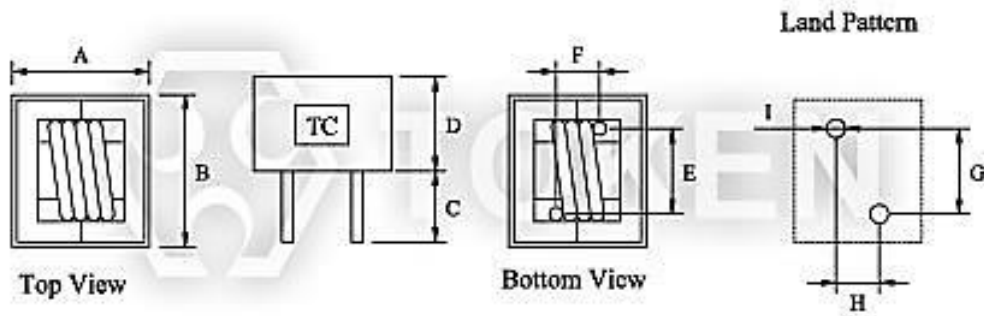
Full line products meet RoHS compliant. Token will also produce devices outside these specifications to meet specific customer requirements, contact us with your specific needs. For more information, please link to Token official website "[Through Hole Inductors](http://www.token.com.tw)".



## Configurations & Dimensions

### Configurations & Dimensions (Unit: mm) (TC1213)

| Type    | A(max) | B(max) | C ± 1.0 | D(max) | E(Ref.) | F(Ref.) | G   | H   | I   |
|---------|--------|--------|---------|--------|---------|---------|-----|-----|-----|
| TC1213  | 14.0   | 14.5   | 5.0     | 9.5    | 7.0     | 5.0     | 7.5 | 5.5 | 1.8 |
| TC1213A | 14.0   | 14.5   | 5.0     | 9.5    | 7.0     | 5.0     | 7.5 | 5.5 | 1.8 |
| TC1213B | 14.5   | 14.5   | 5.0     | 9.5    | 7.0     | 5.0     | 7.5 | 5.5 | 1.8 |



High Current Wire wounds (TC1213) Dimensions

- Note: Design as Customer's Requested Specifications.

## Electrical Characteristics

### Electrical Characteristics (TC1213)

| Part Number    | Inductance(μH) | Test Freq.(KHz) | DCR (Ω)(max) | Peak Current (A) (max) | I <sub>rms</sub> (A)(max) |
|----------------|----------------|-----------------|--------------|------------------------|---------------------------|
| TC1213 - R68N  | 0.68           | 100             | 0.0015       | 40.00                  | 20.00                     |
| TC1213A - R33N | 0.33           | 100             | 0.0015       | 40.00                  | 20.00                     |
| TC1213B - 1R0N | 1.00           | 100             | 0.0015       | 35.00                  | 20.00                     |

Note:

- Test Freq.: 100KHz / 0.1V.
- Operating Temp.: -40°C ~ +85°C
- Inductance drop = 10% typ. at Peak Current.
- ΔT=40°C rise at I<sub>rms</sub>.

## Order Codes

### Order Codes (TC1213)

| TC1213B     | - | 1R0        | N         |
|-------------|---|------------|-----------|
| Part Number |   | Inductance | Tolerance |
| TC1213      |   | R68        | 0.68μH    |
| TC1213A     |   | 1R0        | 1.00μH    |
| TC1213B     |   |            | N         |
|             |   |            | 30%       |

**► General Information****Leading-Edge Technology**

Token Electronics brand passive component specializes in standard and custom solutions offering the latest in state-of-the-art low profile high power density inductor components. Token provides cost-effective, comprehensive solutions that meet the evolving needs of technology-driven markets. In working closely with the industry leaders in chipset and core development, we remain at the forefront of innovation and new technology to deliver the optimal mix of packaging, high efficiency and unbeatable reliability. Our designs utilize high frequency, low core loss materials, new and custom core shapes in combination with innovative construction and packaging to provide designers with the highest performance parts available on the market.

**Find Inductor Solutions Faster**

**Find Your Inductor** - wt.moc.nekot@qfr

Only timely and accurate information can help manage the changing needs of your customers. The Token Inductor Finder puts you only a click away from all of the inductor information you need.

**Find Your Solution** - wt.moc.nekot@qfr

Selecting the correct inductor solution will not only save you time, but it will give you a competitive edge. At Token, we are committed to helping you find the most efficient alternative for your power design. Our inductor and power supply design experts can help you make that selection.

Please forward us:

- A brief description of your particular application's requirements.
- Details of an existing solution that you'd like to replace, enhance or find an alternative.
- Inquiries for feasibility to tailor a power transformer or inductor to your specific application.

We can also help you with any additional technical information you might need relating to any of our products.

**Ask Us Today**

