

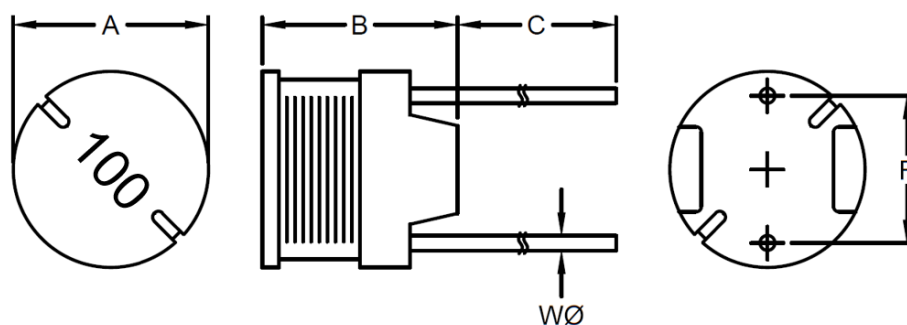
## 1. Part No. Expression

**R C C 0 8 0 7 1 0 0 M Z F**

(a) (b) (c) (d) (e) (f)

- |                     |                    |
|---------------------|--------------------|
| (a) Series Code     | (d) Tolerance Code |
| (b) Dimension Code  | (e) Special Code   |
| (c) Inductance Code | (f) Packaging Code |

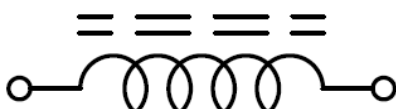
## 2. Configuration & Dimensions (Unit: mm)



Note: Marking: Inductance Code

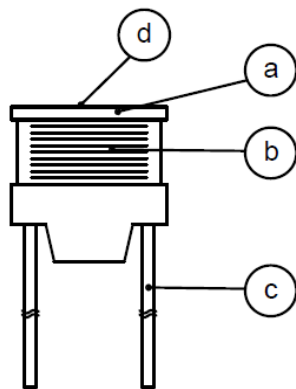
| A         | B        | C          | F         | W         |
|-----------|----------|------------|-----------|-----------|
| 7.80±0.50 | 7.50 Max | 15.00±3.00 | 5.00±0.50 | 0.65±0.10 |

## 3. Schematic



NOTE: Specifications subject to change without notice. Please check our website for latest information.

## 4. Material List



- (a) Core
- (b) Wire
- (c) Lead
- (d) Ink

## 5. General Specifications

- (a) Operating Temp.: - 40°C to + 85°C (including self-temperature rise)
- (b) Storage Temp.: -40°C to +125°C (on board)
- (c) Heat Rated Current (I<sub>rms</sub>) will cause the coil temperature rise  $\Delta T$  of 40°C Max.
- (d) Saturation Current (I<sub>sat</sub>) will cause inductance L<sub>0</sub> to drop 10% Max.
- (e) Storage Condition (Component in its packaging)
  - i) Temperature: Less than 40°C
  - ii) Humidity: Less than 60% RH

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## 6. Electrical Characteristics

| Part Number   | Inductance<br>( $\mu$ H) @0A | Test<br>Frequency | RDC<br>( $\Omega$ )<br>Max | IDC<br>(A)<br>Max |
|---------------|------------------------------|-------------------|----------------------------|-------------------|
| RCC0807100MZF | 10                           | 1V/2.52MHz        | 0.05                       | 2.90              |
| RCC0807120MZF | 12                           | 1V/2.52MHz        | 0.06                       | 2.50              |
| RCC0807150KZF | 15                           | 1V/2.52MHz        | 0.07                       | 2.20              |
| RCC0807180KZF | 18                           | 1V/2.52MHz        | 0.08                       | 1.90              |
| RCC0807220KZF | 22                           | 1V/2.52MHz        | 0.09                       | 1.80              |
| RCC0807270KZF | 27                           | 1V/2.52MHz        | 0.11                       | 1.70              |
| RCC0807330KZF | 33                           | 1V/2.52MHz        | 0.13                       | 1.50              |
| RCC0807390KZF | 39                           | 1V/2.52MHz        | 0.14                       | 1.30              |
| RCC0807470KZF | 47                           | 1V/2.52MHz        | 0.15                       | 1.30              |
| RCC0807560KZF | 56                           | 1V/2.52MHz        | 0.18                       | 1.20              |
| RCC0807680KZF | 68                           | 1V/2.52MHz        | 0.20                       | 1.10              |
| RCC0807820KZF | 82                           | 1V/2.52MHz        | 0.24                       | 1.00              |
| RCC0807101KZF | 100                          | 1V/1KHz           | 0.28                       | 0.89              |
| RCC0807121KZF | 120                          | 1V/1KHz           | 0.36                       | 0.81              |
| RCC0807151KZF | 150                          | 1V/1KHz           | 0.42                       | 0.72              |
| RCC0807181KZF | 180                          | 1V/1KHz           | 0.57                       | 0.66              |
| RCC0807221KZF | 220                          | 1V/1KHz           | 0.63                       | 0.57              |
| RCC0807271KZF | 270                          | 1V/1KHz           | 0.88                       | 0.51              |
| RCC0807331KZF | 330                          | 1V/1KHz           | 1.05                       | 0.46              |
| RCC0807391KZF | 390                          | 1V/1KHz           | 1.17                       | 0.44              |
| RCC0807471KZF | 470                          | 1V/1KHz           | 1.34                       | 0.41              |
| RCC0807561KZF | 560                          | 1V/1KHz           | 1.72                       | 0.36              |
| RCC0807681KZF | 680                          | 1V/1KHz           | 1.96                       | 0.33              |
| RCC0807821KZF | 820                          | 1V/1KHz           | 2.56                       | 0.30              |
| RCC0807102KZF | 1000                         | 1V/1KHz           | 2.94                       | 0.27              |

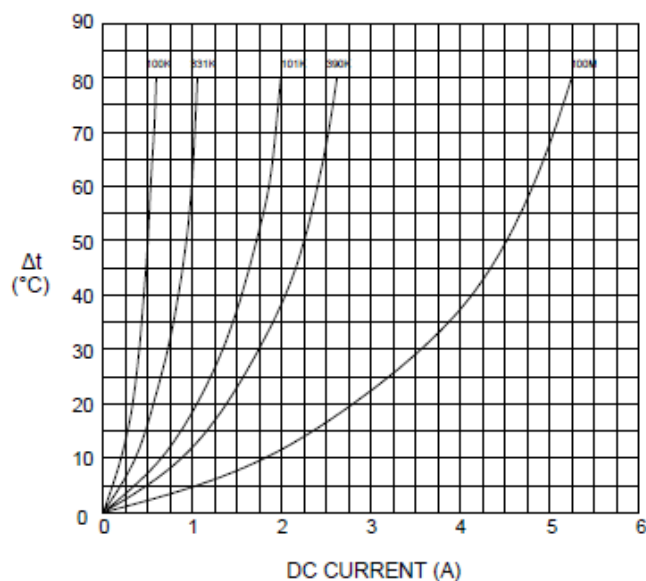
Note:

Tolerance code: K= $\pm$ 10%, M= $\pm$ 20%

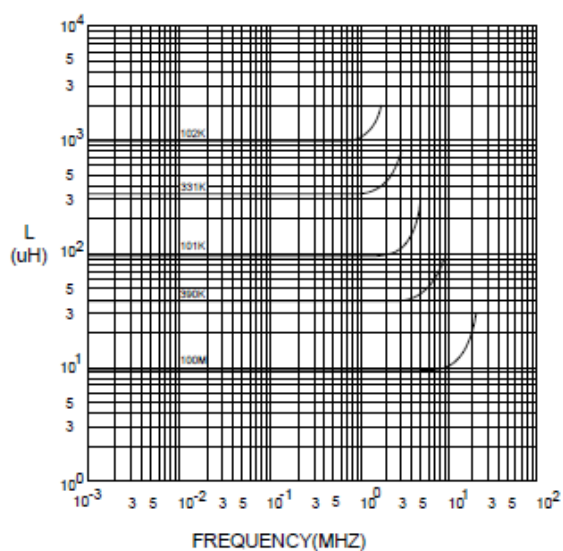
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## 7. Characteristics Curves

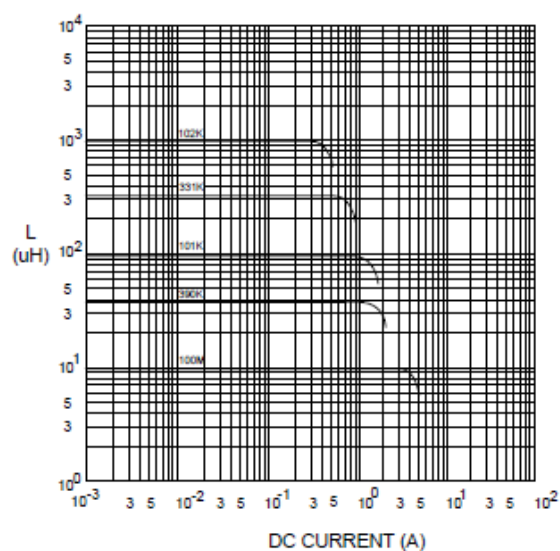
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



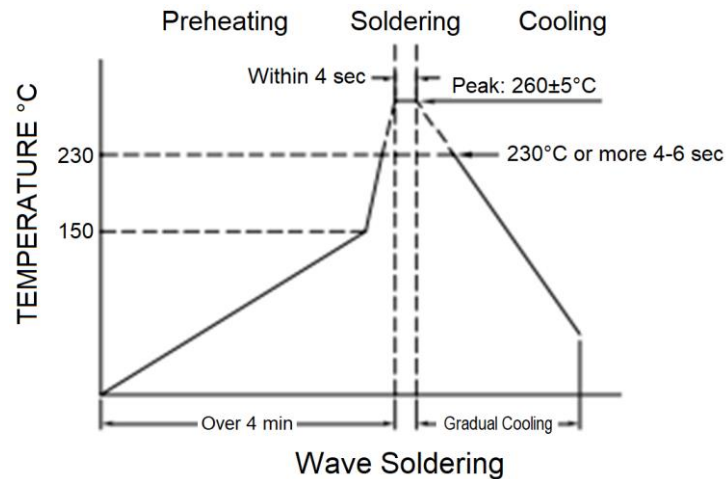
@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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## 8. Soldering Specification

Mildly activated rosin fluxes are preferred. The minimum amount of solder can lead to damage from the stresses caused by the difference in coefficients of expansion between solder, chip and substrate. Our terminations are suitable for wave soldering.



## 9. Packaging Information (Unit: Pcs)

| INNER PACKAGE | INNER PACKAGE Q'TY |
|---------------|--------------------|
| TRAY          | 100                |

## Application Notice

### 1. Storage Conditions

To maintain the solderability of terminal electrodes:

- (a) Recommended products should be used within 12 months from the time of delivery.
- (b) The packaging material should be kept where no chlorine or sulfur exists in the air.

### 2. Transportation

- (a) Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- (b) Vacuum pick up is strongly recommended for individual components.
- (c) Bulk handling should ensure that abrasion and mechanical shock are minimized.

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