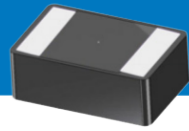


# 小尺寸模压片式功率电感—MWTC 系列

## Mini Molded Chip Power Inductors—MWTC Series



### 工作温度

#### Operating Temp

- ◆  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$  (Including self-heating)

### 特征

#### Features

- ◆ 铁合金材料，高通流，低损耗
- ◆ 黑胶热喷，表面致密性更好
- ◆ 闭合磁路设计，漏磁干扰小
- ◆ Metal material for large current and low loss
- ◆ Vinyl thermal spray, better surface compactness
- ◆ Closed magnetic circuit design reduces leakage flux

### 用途

#### Applications

- ◆ 智能手机、平板
- ◆ 笔记本电脑、虚拟现实、增强现实
- ◆ 便携式游戏机、智能穿戴、WiFi 模组
- ◆ Smart phone, pad
- ◆ Notebooks, VR, AR
- ◆ Portable gaming devices, Smart wear, Wi-Fi module

### 产品型号

#### Product Identification

|      |        |   |     |   |   |     |
|------|--------|---|-----|---|---|-----|
| 1    | 2      | 3 | 4   | 5 | 6 | 7   |
| MWTC | 201608 | S | XXX | □ | T | □□□ |

1

分类 Type

|      |                                                |
|------|------------------------------------------------|
| MWTC | 小尺寸模压片式功率电感<br>Mini Molded Chip Power Inductor |
|------|------------------------------------------------|

4

公称电感量 Nominal Inductance

|         |               |
|---------|---------------|
| Example | Nominal Value |
| R47     | 0.47μH        |
| 1R0     | 1.0μH         |

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包装 Packing

|   |                |
|---|----------------|
| T | 编带 Tape & Reel |
|---|----------------|

2

外形尺寸 (L×W×H) [mm]  
External Dimensions (L×W×H) [mm]

|         |              |
|---------|--------------|
| 1412065 | 1.4×1.2×0.65 |
| 141208  | 1.4×1.2×0.8  |
| 160808  | 1.6×0.8×0.8  |
| 2012065 | 2.0×1.2×0.65 |
| 201208  | 2.0×1.2×0.8  |
| 201210  | 2.0×1.2×1.0  |
| 2016065 | 2.0×1.6×0.65 |
| 201608  | 2.0×1.6×0.8  |
| 201610  | 2.0×1.6×1.0  |
| 252008  | 2.5×2.0×0.8  |
| 252010  | 2.5×2.0×1.0  |

3

特征代码 Feature Type

|   |          |
|---|----------|
| S | Standard |
|---|----------|

5

感量精度 Inductance Tolerance

|   |      |
|---|------|
| M | ±20% |
| N | ±30% |

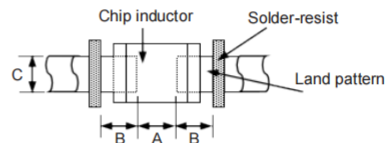
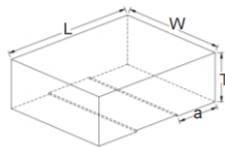
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设计代号 Design Code

|                             |             |
|-----------------------------|-------------|
| □□□                         | Design Code |
| * Standard product is blank |             |

### 外观尺寸

#### Shape and Dimensions



Unit: mm

| Series      | L       | W       | T Max. | a        | A Typ. | B Typ. | C Typ. |
|-------------|---------|---------|--------|----------|--------|--------|--------|
| MWTC1412065 | 1.4±0.2 | 1.2±0.2 | 0.65   | 0.4±0.15 | 0.5    | 0.6    | 1.2    |
| MWTC141208  | 1.4±0.2 | 1.2±0.2 | 0.8    | 0.4±0.15 | 0.5    | 0.6    | 1.2    |
| MWTC160808  | 1.6±0.2 | 0.8±0.2 | 0.8    | 0.4±0.2  | 0.7    | 0.6    | 0.8    |
| MWTC2012065 | 2.0±0.2 | 1.2±0.2 | 0.65   | 0.6±0.2  | 0.7    | 0.8    | 1.2    |
| MWTC201208  | 2.0±0.2 | 1.2±0.2 | 0.8    | 0.6±0.2  | 0.7    | 0.8    | 1.2    |
| MWTC201210  | 2.0±0.2 | 1.2±0.2 | 1.0    | 0.6±0.2  | 0.7    | 0.8    | 1.2    |
| MWTC2016065 | 2.0±0.2 | 1.6±0.2 | 0.65   | 0.6±0.2  | 0.7    | 0.8    | 1.6    |
| MWTC201608  | 2.0±0.2 | 1.6±0.2 | 0.8    | 0.6±0.2  | 0.7    | 0.8    | 1.6    |
| MWTC201610  | 2.0±0.2 | 1.6±0.2 | 1.0    | 0.6±0.2  | 0.7    | 0.8    | 1.6    |
| MWTC252008  | 2.5±0.2 | 2.0±0.2 | 0.8    | 0.8±0.2  | 0.8    | 1.0    | 2.0    |
| MWTC252010  | 2.5±0.2 | 2.0±0.2 | 1.0    | 0.8±0.2  | 0.8    | 1.0    | 2.0    |

## 规格特性 Specifications

MWTC1412065 Series

| 型号 Part Number         | 电感量<br>Inductance | 直流电阻<br>DC Resistance |        | 自谐频率<br>Self-resonant<br>Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|------------------------|-------------------|-----------------------|--------|------------------------------------|----------------------------|------|-----------------------------|------|
|                        | @1MHz,1V          | Max.                  | Typ.   | Min.                               | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units               | μH                | Ω                     |        | MHz                                | A                          |      | A                           |      |
| 符号 Symbol              | L                 | DCR                   |        | S.R.F                              | Isat                       |      | Irms                        |      |
| MWTC1412065SR10 □ T    | 0.10              | 0.0135                | 0.0115 | 125                                | 6.8                        | 7.4  | 6.0                         | 6.3  |
| MWTC1412065SR24 □ T    | 0.24              | 0.026                 | 0.024  | 125                                | 5.5                        | 6.0  | 4.0                         | 4.5  |
| MWTC1412065SR24 □ TB02 | 0.24              | 0.0235                | 0.0195 | 125                                | 6.5                        | 6.8  | 4.2                         | 4.6  |
| MWTC1412065SR33 □ T    | 0.33              | 0.032                 | 0.028  | 120                                | 5.4                        | 5.7  | 3.5                         | 3.7  |
| MWTC1412065SR47 □ T    | 0.47              | 0.041                 | 0.036  | 115                                | 3.0                        | 3.3  | 2.9                         | 3.2  |
| MWTC1412065SR47 □ TB01 | 0.47              | 0.038                 | 0.034  | 115                                | 3.6                        | 4.0  | 3.0                         | 3.3  |

MWTC141208 Series

| 型号 Part Number     | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐频率<br>Self-resonant<br>Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|--------------------|-------------------|-----------------------|-------|------------------------------------|----------------------------|------|-----------------------------|------|
|                    | @1MHz,1V          | Max.                  | Typ.  | Min.                               | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units           | μH                | Ω                     |       | MHz                                | A                          |      | A                           |      |
| 符号 Symbol          | L                 | DCR                   |       | S.R.F                              | Isat                       |      | Irms                        |      |
| MWTC141208SR24 □ T | 0.24              | 0.024                 | 0.020 | 135                                | 6.5                        | 7.0  | 4.9                         | 5.3  |
| MWTC141208SR33 □ T | 0.33              | 0.027                 | 0.023 | 130                                | 5.2                        | 5.6  | 4.0                         | 4.2  |
| MWTC141208SR47 □ T | 0.47              | 0.032                 | 0.028 | 110                                | 4.0                        | 4.2  | 3.2                         | 3.6  |

MWTC160808 Series

| 型号 Part Number     | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐频率<br>Self-resonant<br>Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|--------------------|-------------------|-----------------------|-------|------------------------------------|----------------------------|------|-----------------------------|------|
|                    | @1MHz,1V          | Max.                  | Typ.  | Min.                               | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units           | μH                | Ω                     |       | MHz                                | A                          |      | A                           |      |
| 符号 Symbol          | L                 | DCR                   |       | S.R.F                              | Isat                       |      | Irms                        |      |
| MWTC160808SR24 □ T | 0.24              | 0.027                 | 0.023 | 105                                | 4.8                        | 5.3  | 3.5                         | 3.9  |
| MWTC160808SR47 □ T | 0.47              | 0.043                 | 0.038 | 100                                | 3.3                        | 3.6  | 3.0                         | 3.3  |
| MWTC160808SR56 □ T | 0.56              | 0.058                 | 0.050 | 80                                 | 2.7                        | 3.0  | 2.2                         | 2.5  |
| MWTC160808S1R0 □ T | 1.0               | 0.110                 | 0.095 | 60                                 | 2.1                        | 2.3  | 1.8                         | 2.0  |
| MWTC160808S2R2 □ T | 2.2               | 0.290                 | 0.240 | 40                                 | 1.2                        | 1.3  | 1.0                         | 1.1  |

MWTC2012065 Series

| 型号 Part Number         | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐频率<br>Self-resonant<br>Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|------------------------|-------------------|-----------------------|-------|------------------------------------|----------------------------|------|-----------------------------|------|
|                        | @1MHz,1V          | Max.                  | Typ.  | Min.                               | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units               | μH                | Ω                     |       | MHz                                | A                          |      | A                           |      |
| 符号 Symbol              | L                 | DCR                   |       | S.R.F                              | Isat                       |      | Irms                        |      |
| MWTC2012065SR24 □ T    | 0.24              | 0.028                 | 0.024 | 139                                | 5.3                        | 6.2  | 4.5                         | 4.8  |
| MWTC2012065SR24 □ TB01 | 0.24              | 0.020                 | 0.016 | 139                                | 6.4                        | 6.8  | 4.8                         | 5.5  |
| MWTC2012065SR47 □ T    | 0.47              | 0.034                 | 0.032 | 96                                 | 4.5                        | 4.8  | 4.0                         | 4.3  |
| MWTC2012065SR47 □ TY01 | 0.47              | 0.034                 | 0.032 | 96                                 | 4.8                        | 5.1  | 3.8                         | 4.1  |
| MWTC2012065S1R0 □ T    | 1.0               | 0.086                 | 0.078 | 53                                 | 2.5                        | 2.7  | 2.4                         | 2.7  |
| MWTC2012065S2R2 □ T    | 2.2               | 0.200                 | 0.173 | 50                                 | 1.6                        | 1.8  | 1.5                         | 1.8  |
| MWTC2012065S2R2 □ TB01 | 2.2               | 0.160                 | 0.127 | 36                                 | 1.8                        | 2.0  | 2.0                         | 2.2  |

## 规格特性 Specifications

MWTC201208 Series

| 型号 Part Number        | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|-----------------------|-------------------|-----------------------|-------|---------------------------------|----------------------------|------|-----------------------------|------|
|                       | @1MHz,1V          | Max.                  | Typ.  | Min.                            | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units              | μH                | Ω                     |       | MHz                             | A                          |      | A                           |      |
| 符号 Symbol             | L                 | DCR                   |       | S.R.F                           | Isat                       |      | Irms                        |      |
| MWTC201208SR11 □ T    | 0.11              | 0.013                 | 0.010 | 185                             | 10                         | 11   | 5.6                         | 6.5  |
| MWTC201208SR24 □ T    | 0.24              | 0.019                 | 0.016 | 130                             | 6.5                        | 7.2  | 5.4                         | 6.0  |
| MWTC201208SR33 □ T    | 0.33              | 0.028                 | 0.023 | 125                             | 5.6                        | 6.2  | 4.0                         | 4.3  |
| MWTC201208SR33 □ TB01 | 0.33              | 0.025                 | 0.023 | 125                             | 5.4                        | 6.2  | 4.1                         | 4.3  |
| MWTC201208SR47 □ T    | 0.47              | 0.042                 | 0.037 | 96                              | 5.5                        | 6.2  | 3.7                         | 3.9  |
| MWTC201208SR47 □ TY02 | 0.47              | 0.025                 | 0.020 | 96                              | 4.8                        | 5.3  | 4.0                         | 4.4  |
| MWTC201208S1R0 □ T    | 1.0               | 0.102                 | 0.092 | 74                              | 2.8                        | 3.1  | 2.0                         | 2.3  |
| MWTC201208S1R0 □ TD01 | 1.0               | 0.050                 | 0.046 | 60                              | 3.3                        | 3.5  | 3.2                         | 3.5  |
| MWTC201208S2R2 □ T    | 2.2               | 0.238                 | 0.216 | 45                              | 2.2                        | 2.5  | 1.1                         | 1.3  |
| MWTC201208S2R2 □ TD01 | 2.2               | 0.130                 | 0.120 | 42                              | 1.9                        | 2.1  | 1.8                         | 2.0  |

MWTC201210 Series

| 型号 Part Number        | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|-----------------------|-------------------|-----------------------|-------|---------------------------------|----------------------------|------|-----------------------------|------|
|                       | @1MHz,1V          | Max.                  | Typ.  | Min.                            | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units              | μH                | Ω                     |       | MHz                             | A                          |      | A                           |      |
| 符号 Symbol             | L                 | DCR                   |       | S.R.F                           | Isat                       |      | Irms                        |      |
| MWTC201210SR11 □ T    | 0.11              | 0.010                 | 0.008 | 264                             | 13.0                       | 14.5 | 6.4                         | 7.1  |
| MWTC201210SR24 □ T    | 0.24              | 0.022                 | 0.019 | 136                             | 6.2                        | 6.7  | 4.5                         | 5.0  |
| MWTC201210SR24 □ TD01 | 0.24              | 0.015                 | 0.012 | 136                             | 6.8                        | 7.5  | 5.0                         | 5.5  |
| MWTC201210SR47 □ T    | 0.47              | 0.024                 | 0.021 | 96                              | 5.1                        | 5.7  | 4.8                         | 5.2  |
| MWTC201210S1R0 □ T    | 1.0               | 0.051                 | 0.046 | 56                              | 3.6                        | 4.0  | 3.1                         | 3.5  |
| MWTC201210S2R2 □ T    | 2.2               | 0.112                 | 0.100 | 36                              | 2.1                        | 2.4  | 1.9                         | 2.2  |

MWTC2016065 Series

| 型号 Part Number         | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|------------------------|-------------------|-----------------------|-------|---------------------------------|----------------------------|------|-----------------------------|------|
|                        | @1MHz,1V          | Max.                  | Typ.  | Min.                            | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units               | μH                | Ω                     |       | MHz                             | A                          |      | A                           |      |
| 符号 Symbol              | L                 | DCR                   |       | S.R.F                           | Isat                       |      | Irms                        |      |
| MWTC2016065SR33 □ T    | 0.33              | 0.029                 | 0.026 | 110                             | 4.6                        | 5.0  | 3.9                         | 4.3  |
| MWTC2016065SR47 □ T    | 0.47              | 0.050                 | 0.044 | 105                             | 5.5                        | 6.1  | 3.2                         | 3.5  |
| MWTC2016065SR47 □ TD01 | 0.47              | 0.045                 | 0.038 | 102                             | 4.4                        | 4.8  | 3.4                         | 3.6  |
| MWTC2016065SR68 □ T    | 0.68              | 0.053                 | 0.046 | 81                              | 3.2                        | 3.4  | 2.8                         | 3.1  |
| MWTC2016065S1R0 □ T    | 1.0               | 0.060                 | 0.055 | 53                              | 3.2                        | 3.6  | 3.2                         | 3.6  |
| MWTC2016065S1R0 □ TB01 | 1.0               | 0.060                 | 0.055 | 53                              | 3.6                        | 4.0  | 2.7                         | 3.0  |
| MWTC2016065S2R2 □ T    | 2.2               | 0.215                 | 0.185 | 41                              | 1.75                       | 1.95 | 1.15                        | 1.35 |
| MWTC2016065S2R2 □ TD01 | 2.2               | 0.165                 | 0.145 | 38                              | 2.15                       | 2.45 | 1.55                        | 1.85 |

MWTC201608 Series

| 型号 Part Number     | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|--------------------|-------------------|-----------------------|-------|---------------------------------|----------------------------|------|-----------------------------|------|
|                    | @1MHz,1V          | Max.                  | Typ.  | Min.                            | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units           | μH                | Ω                     |       | MHz                             | A                          |      | A                           |      |
| 符号 Symbol          | L                 | DCR                   |       | S.R.F                           | Isat                       |      | Irms                        |      |
| MWTC201608SR24 □ T | 0.24              | 0.022                 | 0.018 | 120                             | 7.5                        | 8.2  | 5.5                         | 6.2  |
| MWTC201608SR33 □ T | 0.33              | 0.026                 | 0.021 | 115                             | 6.6                        | 7.2  | 5.1                         | 5.7  |
| MWTC201608SR47 □ T | 0.47              | 0.024                 | 0.021 | 104                             | 5.0                        | 5.5  | 3.6                         | 4.1  |

## 规格特性 Specifications

MWTC201608 Series

| 型号 Part Number        | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐振频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|-----------------------|-------------------|-----------------------|-------|----------------------------------|----------------------------|------|-----------------------------|------|
|                       | @1MHz,1V          | Max.                  | Typ.  | Min.                             | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units              | μH                | Ω                     |       | MHz                              | A                          |      | A                           |      |
| 符号 Symbol             | L                 | DCR                   |       | S.R.F                            | Isat                       |      | Irms                        |      |
| MWTC201608SR68 □ T    | 0.68              | 0.049                 | 0.042 | 74                               | 4.4                        | 4.8  | 3.7                         | 4.2  |
| MWTC201608S1R0 □ T    | 1.0               | 0.066                 | 0.059 | 62                               | 3.3                        | 3.7  | 2.7                         | 3.0  |
| MWTC201608S1R0 □ TD01 | 1.0               | 0.052                 | 0.045 | 57                               | 4.1                        | 4.5  | 3.7                         | 4.2  |
| MWTC201608S1R5 □ T    | 1.5               | 0.086                 | 0.073 | 56                               | 3.0                        | 3.3  | 2.3                         | 2.5  |
| MWTC201608S2R2 □ T    | 2.2               | 0.148                 | 0.134 | 40                               | 2.3                        | 2.6  | 1.8                         | 2.0  |
| MWTC201608S2R2 □ TD01 | 2.2               | 0.090                 | 0.080 | 33                               | 2.3                        | 2.5  | 2.3                         | 2.5  |
| MWTC201608S2R2 □ TY01 | 2.2               | 0.110                 | 0.100 | 33                               | 2.9                        | 3.2  | 2.4                         | 2.6  |

MWTC201610 Series

| 型号 Part Number        | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐振频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|-----------------------|-------------------|-----------------------|-------|----------------------------------|----------------------------|------|-----------------------------|------|
|                       | @1MHz,1V          | Max.                  | Typ.  | Min.                             | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units              | μH                | Ω                     |       | MHz                              | A                          |      | A                           |      |
| 符号 Symbol             | L                 | DCR                   |       | S.R.F                            | Isat                       |      | Irms                        |      |
| MWTC201610SR24 □ T    | 0.24              | 0.017                 | 0.014 | 142                              | 7.0                        | 7.8  | 5.0                         | 5.6  |
| MWTC201610SR24 □ TD02 | 0.24              | 0.015                 | 0.011 | 120                              | 7.0                        | 7.8  | 5.0                         | 5.6  |
| MWTC201610SR33 □ T    | 0.33              | 0.021                 | 0.018 | 110                              | 6.8                        | 7.6  | 4.8                         | 5.3  |
| MWTC201610SR47 □ T    | 0.47              | 0.029                 | 0.026 | 98                               | 6.0                        | 6.5  | 4.0                         | 4.4  |
| MWTC201610SR47 □ TD01 | 0.47              | 0.021                 | 0.018 | 72                               | 5.6                        | 6.2  | 4.8                         | 5.5  |
| MWTC201610SR68 □ T    | 0.68              | 0.035                 | 0.030 | 68                               | 4.8                        | 5.4  | 3.5                         | 3.9  |
| MWTC201610S1R0 □ T    | 1.0               | 0.046                 | 0.042 | 46                               | 4.6                        | 4.9  | 3.4                         | 4.0  |
| MWTC201610S1R0 □ TD01 | 1.0               | 0.037                 | 0.034 | 60                               | 4.2                        | 4.5  | 4.2                         | 4.5  |
| MWTC201610S1R5 □ T    | 1.5               | 0.074                 | 0.064 | 40                               | 3.2                        | 3.5  | 2.8                         | 3.2  |
| MWTC201610S2R2 □ T    | 2.2               | 0.135                 | 0.123 | 40                               | 3.8                        | 4.2  | 2.1                         | 2.3  |
| MWTC201610S2R2 □ TD01 | 2.2               | 0.074                 | 0.066 | 30                               | 2.6                        | 2.9  | 2.0                         | 2.3  |
| MWTC201610S4R7 □ T    | 4.7               | 0.235                 | 0.213 | 26                               | 1.6                        | 1.9  | 1.3                         | 1.5  |
| MWTC201610S6R8 □ T    | 6.8               | 0.265                 | 0.240 | 15                               | 1.55                       | 1.75 | 1.4                         | 1.6  |

MWTC252008 Series

| 型号 Part Number        | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐振频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|-----------------------|-------------------|-----------------------|-------|----------------------------------|----------------------------|------|-----------------------------|------|
|                       | @1MHz,1V          | Max.                  | Typ.  | Min.                             | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units              | μH                | Ω                     |       | MHz                              | A                          |      | A                           |      |
| 符号 Symbol             | L                 | DCR                   |       | S.R.F                            | Isat                       |      | Irms                        |      |
| MWTC252008S1R0 □ T    | 1.0               | 0.053                 | 0.046 | 55                               | 3.5                        | 3.8  | 3.2                         | 3.5  |
| MWTC252008S1R0 □ TD01 | 1.0               | 0.046                 | 0.039 | 56                               | 4.3                        | 4.8  | 3.5                         | 3.8  |
| MWTC252008S4R7 □ T    | 4.7               | 0.180                 | 0.165 | 20                               | 1.75                       | 1.95 | 1.8                         | 2.0  |
| MWTC252008S100 □ T    | 10                | 0.570                 | 0.507 | 14                               | 1.2                        | 1.4  | 0.95                        | 1.05 |

MWTC252010 Series

| 型号 Part Number     | 电感量<br>Inductance | 直流电阻<br>DC Resistance |        | 自谐振频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|--------------------|-------------------|-----------------------|--------|----------------------------------|----------------------------|------|-----------------------------|------|
|                    | @1MHz,1V          | Max.                  | Typ.   | Min.                             | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units           | μH                | Ω                     |        | MHz                              | A                          |      | A                           |      |
| 符号 Symbol          | L                 | DCR                   |        | S.R.F                            | Isat                       |      | Irms                        |      |
| MWTC252010SR24 □ T | 0.24              | 0.014                 | 0.0115 | 144                              | 8.4                        | 9.4  | 6.0                         | 7.0  |
| MWTC252010SR33 □ T | 0.33              | 0.016                 | 0.013  | 95                               | 7.5                        | 8.5  | 5.0                         | 5.5  |
| MWTC252010SR47 □ T | 0.47              | 0.020                 | 0.016  | 81                               | 6.0                        | 6.6  | 4.7                         | 5.0  |

## 规格特性 Specifications

### MWTC252010 Series

| 型号 Part Number        | 电感量<br>Inductance | 直流电阻<br>DC Resistance |       | 自谐振频率<br>Self-resonant Frequency | 饱和电流<br>Saturation Current |      | 温升电流<br>Heat Rating Current |      |
|-----------------------|-------------------|-----------------------|-------|----------------------------------|----------------------------|------|-----------------------------|------|
|                       | @1MHz, 1V         | Max.                  | Typ.  | Min.                             | Max.                       | Typ. | Max.                        | Typ. |
| 单位 Units              | μH                | Ω                     |       | MHz                              | A                          |      | A                           |      |
| 符号 Symbol             | L                 | DCR                   |       | S.R.F                            | Isat                       |      | Irms                        |      |
| MWTC252010SR47 □ TD02 | 0.47              | 0.020                 | 0.016 | 81                               | 6.5                        | 7.0  | 5.7                         | 6.1  |
| MWTC252010SR47 □ TB01 | 0.47              | 0.023                 | 0.018 | 61                               | 8.0                        | 8.3  | 6.0                         | 7.0  |
| MWTC252010SR68 □ T    | 0.68              | 0.029                 | 0.024 | 63                               | 5.8                        | 6.6  | 4.5                         | 5.2  |
| MWTC252010S1R0 □ T    | 1.0               | 0.043                 | 0.038 | 53                               | 4.5                        | 5.0  | 3.4                         | 3.7  |
| MWTC252010S1R0 □ TD01 | 1.0               | 0.039                 | 0.032 | 55                               | 5.8                        | 6.5  | 3.6                         | 3.9  |
| MWTC252010S1R0 □ TD02 | 1.0               | 0.030                 | 0.027 | 53                               | 5.0                        | 5.4  | 4.5                         | 4.7  |
| MWTC252010S1R5 □ T    | 1.5               | 0.042                 | 0.037 | 35                               | 3.7                        | 4.0  | 3.6                         | 4.1  |
| MWTC252010S2R2 □ T    | 2.2               | 0.065                 | 0.057 | 27                               | 3.2                        | 3.5  | 2.3                         | 2.6  |
| MWTC252010S3R3 □ T    | 3.3               | 0.110                 | 0.095 | 22                               | 2.6                        | 2.9  | 1.9                         | 2.2  |
| MWTC252010S4R7 □ T    | 4.7               | 0.136                 | 0.124 | 19                               | 1.9                        | 2.2  | 1.6                         | 1.7  |
| MWTC252010S100 □ T    | 10                | 0.420                 | 0.360 | 14                               | 1.5                        | 1.7  | 1.2                         | 1.4  |

※ □ : 请注明电感公差代码 (M=±20%, N=±30%)。

※ □ : Please specify the inductance tolerance code (M=±20%, N=±30%).

※1: 所有的测试数据均以 20°C 环境温度为准;

※1: All test data is referenced to 20°C ambient;

※2: 额定电流: 以 Isat 和 Irms 中更小者为准;

※2: Rated current: Isat or Irms, whichever is smaller;

※3: 饱和电流: 通入直流电流后电感感值从初始状态下下降约 30% 时对应的电流;

※3: Isat: DC current at which the inductance drops approximate 30% from its value without current;

※4: 温升电流: 使得温度从 20°C 环境温度升高 (ΔT=40°C) 的直流电流;

※4: Irms: DC current that causes the temperature rise (ΔT=40°C) from 20°C ambient;

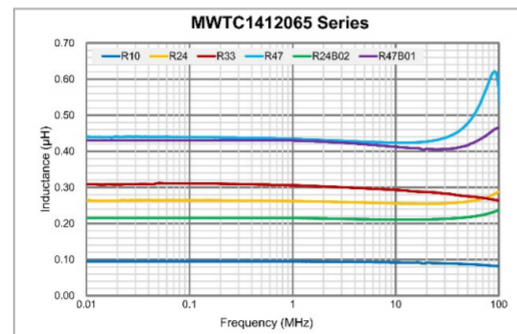
※5: 额定电压: 20V。当使用电压超过额定电压时, 需要额外确认。

※5: Rated voltage: 20V. When the use voltage exceeds the rated voltage, additional confirmation is required.

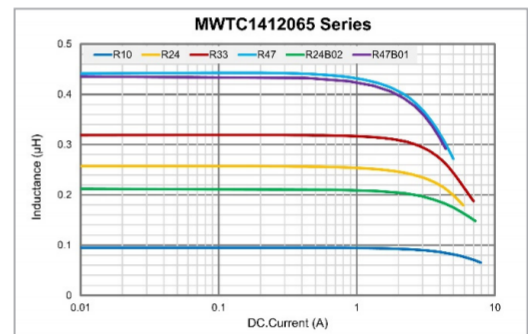
## 电气特性 Typical Electrical Characteristics

### MWTC1412065 Series

#### Inductance vs. Frequency Characteristics

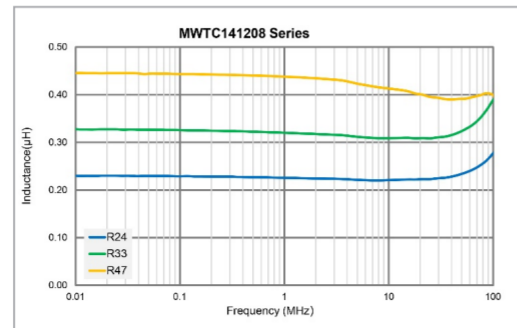


#### Inductance vs. DC Current Characteristics

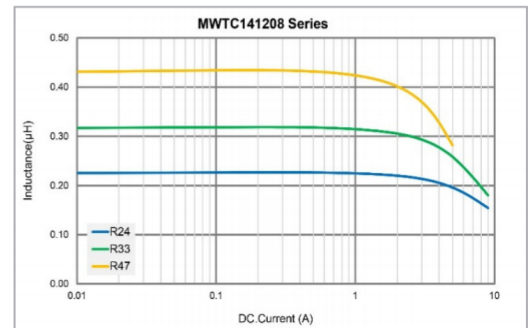


### MWTC141208 Series

#### Inductance vs. Frequency Characteristics



#### Inductance vs. DC Current Characteristics



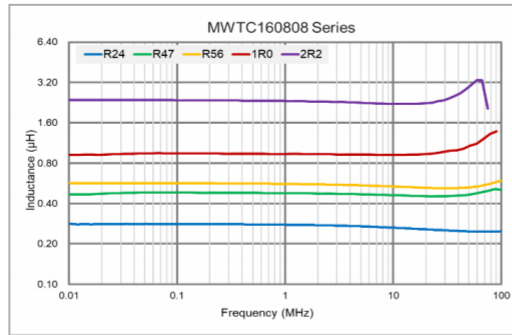


## 电气特性

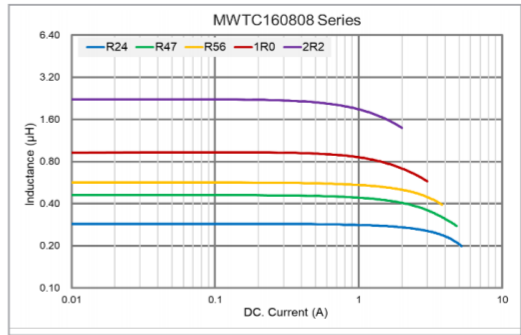
Typical  
Electrical  
Characteristics

### MWTC160808 Series

Inductance vs. Frequency Characteristics

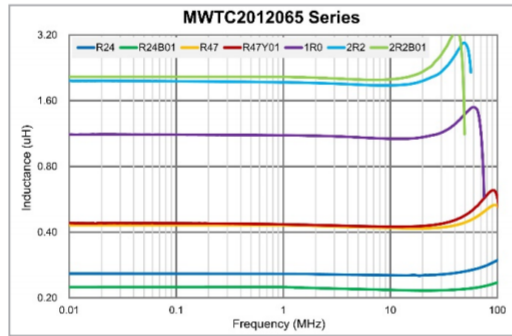


Inductance vs. DC Current Characteristics

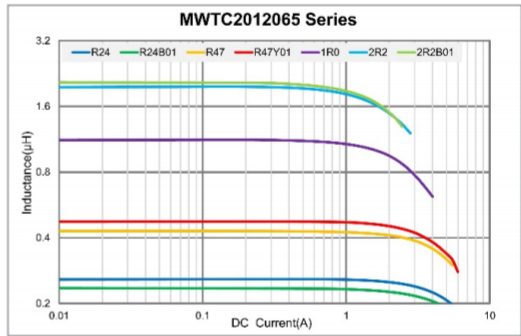


### MWTC2012065 Series

Inductance vs. Frequency Characteristics

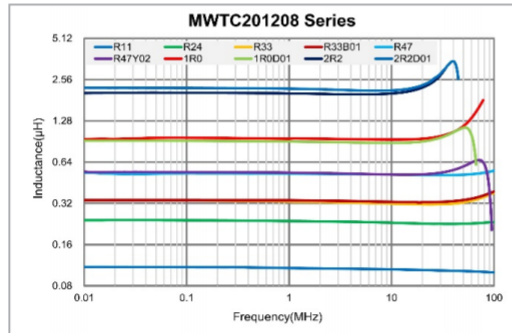


Inductance vs. DC Current Characteristics

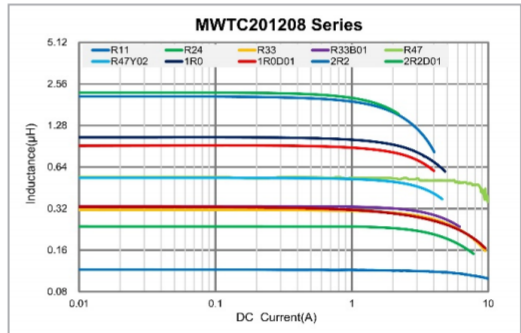


### MWTC201208 Series

Inductance vs. Frequency Characteristics

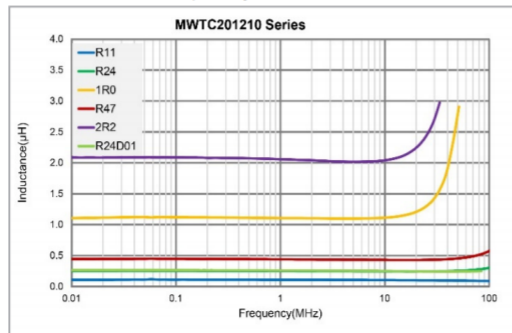


Inductance vs. DC Current Characteristics

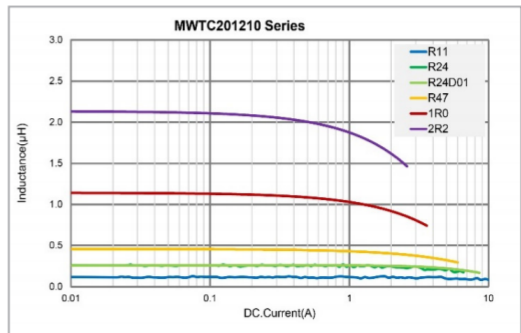


### MWTC201210 Series

Inductance vs. Frequency Characteristics



Inductance vs. DC Current Characteristics

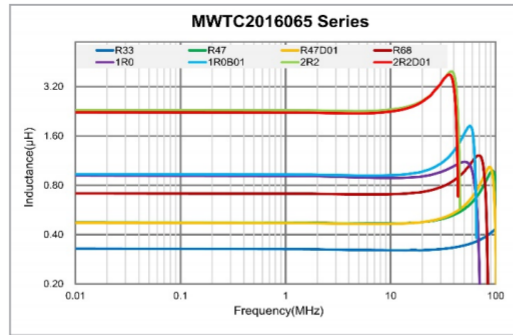


## 电气特性

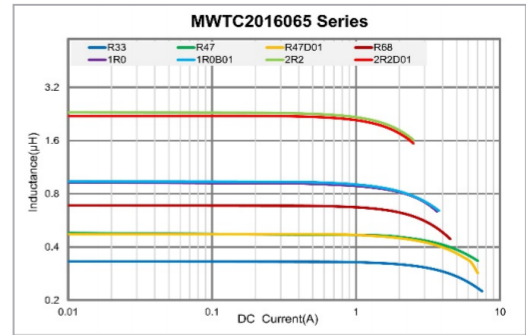
Typical  
Electrical  
Characteristics

### MWTC2016065 Series

Inductance vs. Frequency Characteristics

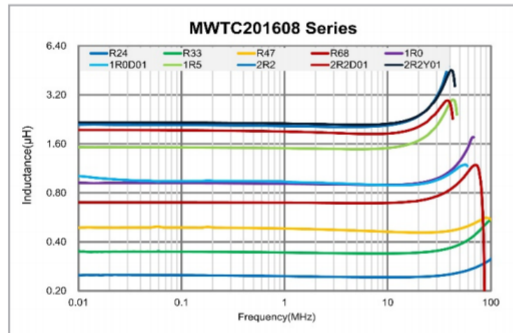


Inductance vs. DC Current Characteristics

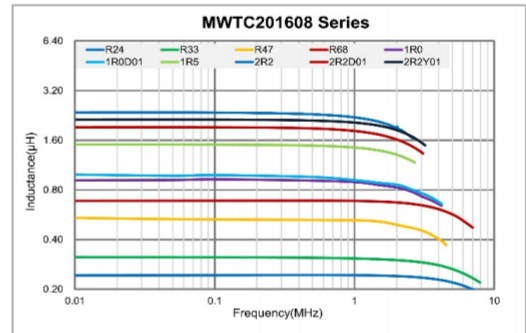


### MWTC201608 Series

Inductance vs. Frequency Characteristics

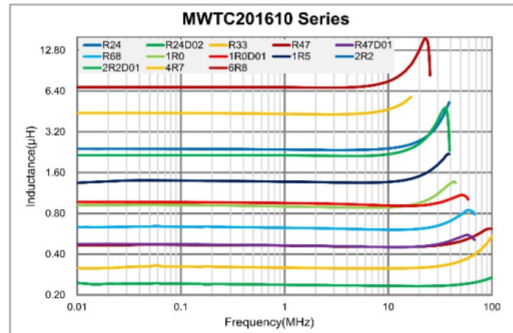


Inductance vs. DC Current Characteristics

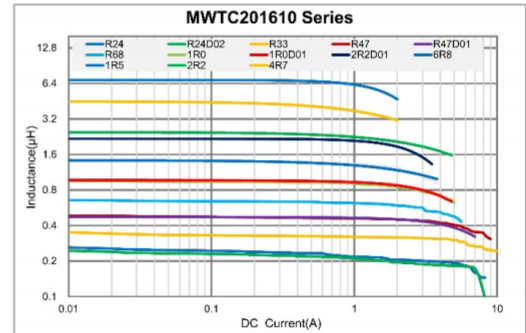


### MWTC201610 Series

Inductance vs. Frequency Characteristics

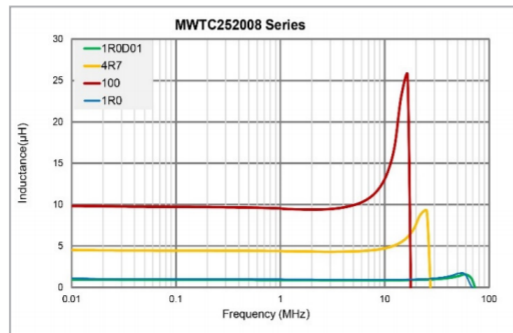


Inductance vs. DC Current Characteristics

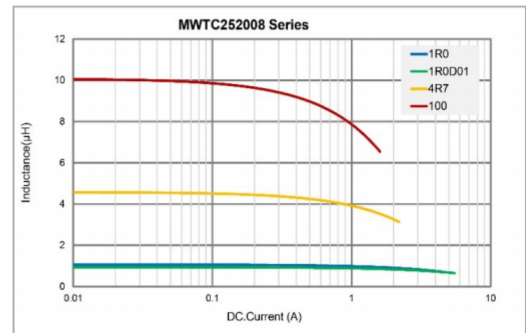


### MWTC252008 Series

Inductance vs. Frequency Characteristics

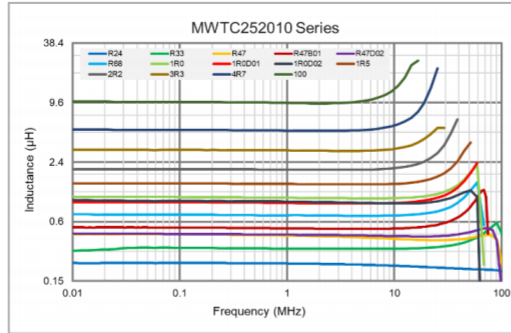


Inductance vs. DC Current Characteristics



# 电气特性 Typical Electrical Characteristics

## MWTC252010 Series Inductance vs. Frequency Characteristics



## Inductance vs. DC Current Characteristics

