

### Power Choke Coil

Series: **PCC-M0512W (MC)**

High power, Low loss, Low-profile



#### ■ Features

- Small type (5.4×5.15×H1.2 mm)
- High power (2.2 A to 5.5 A)
- Low loss ( $R_{DC}$  :19.2 to 168.0 m $\Omega$ )
- Suitable for high frequency circuit (up to 1 MHz)
- Low buzz noise due to its gap-less structure
- RoHS compliant

#### ■ Recommended Applications

- HDD, Tablet PC power supply modules
- Servers, Routers, DC-DC converters for driving CPUs

#### ■ Standard Packing Quantity (Minimum Quantity/Packing Unit)

- 6000 pcs./box (2 reel)

#### ■ Explanation of Part Numbers

| 1            | 2        | 3              | 4        | 5        | 6        | 7          | 8 | 9 | 10   | 11        | 12     |
|--------------|----------|----------------|----------|----------|----------|------------|---|---|------|-----------|--------|
| <b>E</b>     | <b>T</b> | <b>Q</b>       | <b>P</b> | <b>1</b> | <b>W</b> |            |   |   |      |           |        |
| Product Code |          | Classification |          | Size     | Winding  | Inductance |   |   | Core | Packaging | Suffix |

#### ■ Standard Parts

| Part No.     | Inductance (at 20 °C)*1 |        |                         | Rated current (A)*2 | DC resistance (at 20 °C) (mΩ) max. |
|--------------|-------------------------|--------|-------------------------|---------------------|------------------------------------|
|              | L0 at 0A                | L1*3   |                         |                     |                                    |
|              | (μH)                    | (μH)   | Measurement current (A) |                     |                                    |
| ETQP1WR47WFP | 0.47±20 %               | (0.42) | 5.5                     | 5.5                 | 19.2                               |
| ETQP1W1R0WFP | 1.00±20 %               | (0.87) | 4.4                     | 4.4                 | 46.5                               |
| ETQP1W2R2WFP | 2.20±20 %               | (1.80) | 3.4                     | 3.4                 | 77.3                               |
| ETQP1W3R3WFP | 3.30±20 %               | (2.70) | 2.8                     | 2.8                 | 103.0                              |
| ETQP1W4R7WFP | 4.70±20 %               | (3.90) | 2.2                     | 2.2                 | 168.0                              |

(\*1) Inductance is measured at 100 kHz.

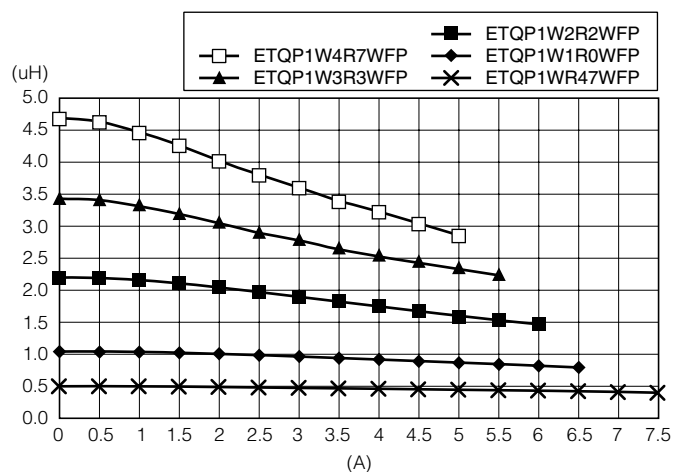
(\*2) Rated current defines actual value of DC current, when temperature rise of coil becomes 40 K. (Method A)

(\*3) Reference only

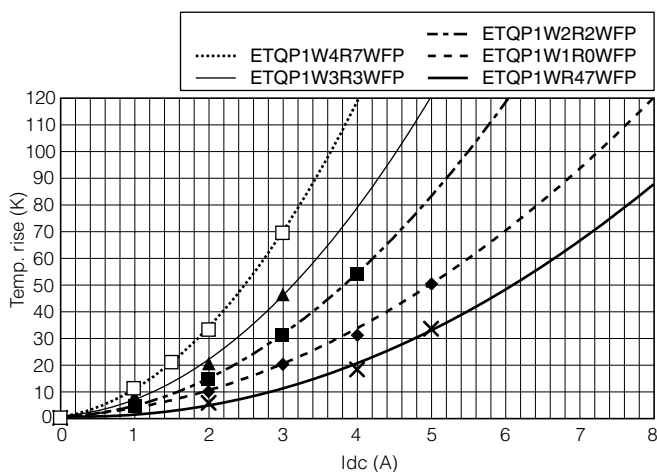
(\*4) Method A (PANASONIC's standard measurement conditions)

## ■ Performance Characteristics (Reference)

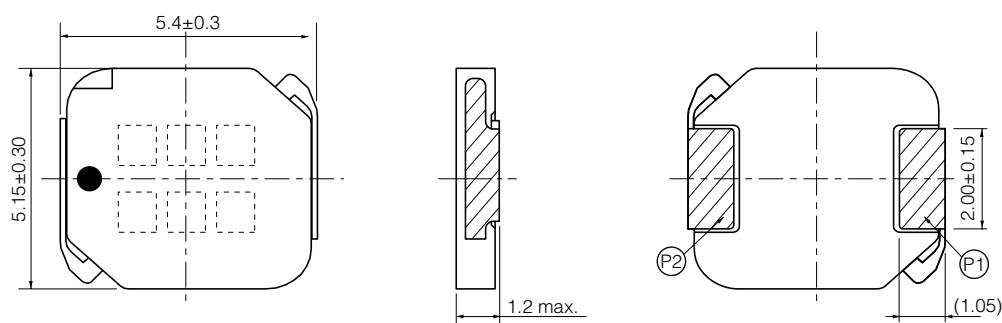
Inductance vs DC Current



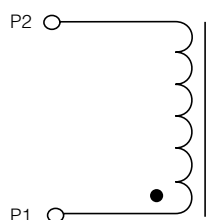
Case Temperature vs DC Current (Method A)



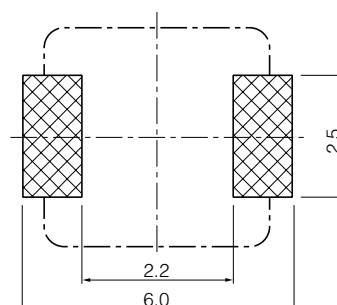
## ■ Dimensions in mm (not to scale)



## ■ Connection



## ■ Recommended Land Pattern in mm (not to scale)



## ■ Packaging Methods, Soldering Conditions and Safety Precautions (Power Choke Coils for Consumer use)

Please see Data Files