

Panasonic

Using breakthrough technology,
we aim for products that will create new markets.

New Product News

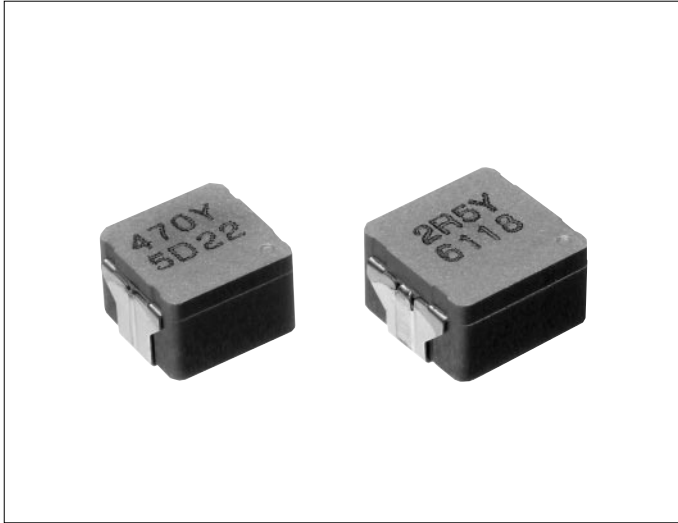
To achieve engine compartment environment condition and requirement.
Ex) High Temperature (up to 150°C) & Vibration (up to 30G)

Power Choke Coil

Power Choke Coil for Automotive Application

Industry/Field: Automotive Application

It's suitable for DC/DC converter of various ECU for automotive application



Development Target:

<Automotive Market Trend >

1. ECU is going to near by Engine compartment.
 2. Bigger rated current will be required for CPU.
- According to this trend, Power Choke Coil for DC/DC converter board will be required

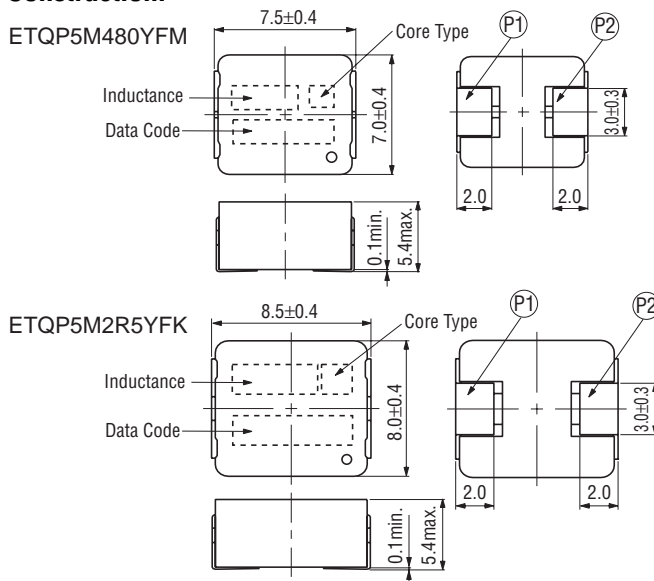
*High temperature and High vibration reliability to survive in the engine compartment environment.

*Bigger rated current capability by smaller package.

Features:

- 1 To achieve engine compartment environment condition and requirement.
Ex) High Temperature (up to 150°C) & Vibration (up to 30G)
 - 2 Small size (7×7 mm size / 8×8 mm size) with high rated current
 - 3 Low Loss at High Frequency (over 300KHz)
- Number of industrial property rights : 17(patent pending)

Construction:



Characteristics/specifications:

| Part No. | | ETQP5M480YFM | ETQP5M2R5YFK | |
|--------------------|----------------|------------------------|--------------|------|
| Inductance*1 | L0 | (μH) | 48.0 | 2.45 |
| | | Tolerance(%) | ±20 | ±20 |
| | L1 (Reference) | (μH) | 47.0 | 2.40 |
| | | Measurement current(A) | 1.0 | 4.5 |
| Rated current(A)*2 | | 1.0 | 4.5 | |
| DC resistance | Center(mΩ) | 156 | 7.6 | |
| | Tolerance(%) | ±15 | ±15 | |
| Series | | PCC-M0754M | PCC-M0854M | |

(*1) Inductance is measured at 100 kHz

(*2) Case heating current is the value of the current at which the temperature of the coil case rises 15°C above its initial temperature with T(ambient)= 25°C

Applications/usage examples:

- Choke coil for DC/DC convert unit on ECU of automotive application
- Noise Filter for various Driver Unit on ECU of automotive application which needs to work in "High Temperature" and support for "Big Peak Current"

Explanation of part numbers:

