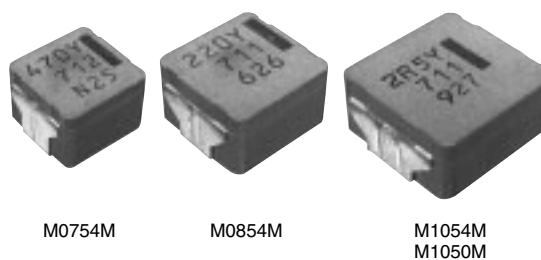


Power Choke Coil for Automotive application

Series: **PCC-M0754M (MC)**
PCC-M0854M (MC)
PCC-M1054M (MC)
PCC-M1050M (MC)

Realize high heat resistance and high reliability with metal composite core(MC)

Industrial Property : patents 21 (Registered 2/Pending 19)



Features

- High heat resistance : Operation up to 150 °C
- High-reliability : High vibration tolerance in high temperature due to newly developed integral construction and severe condition of automotive application is cleared
- High bias current : Excellent inductance stability by using ferrous alloy magnetic material(Fig.1)
- Temp. stability : Excellent inductance stability in wide temp. range (Fig.1)
- Low buzz noise : New metal composite core technology
- High efficiency : Low R_{DC} of winding and low eddy-current loss of the core

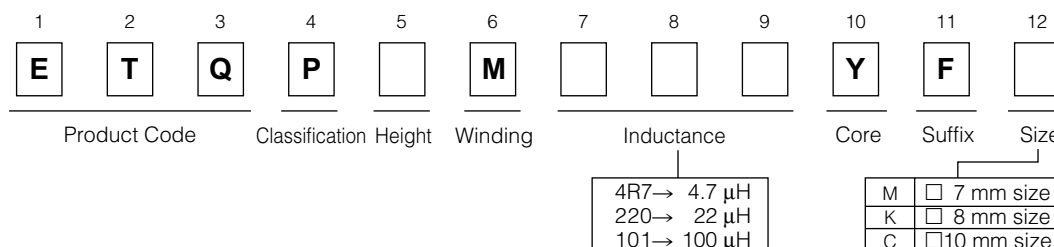
Recommended Applications

- Noise filter for various drive circuitry requiring high temp. operation and peak current handling capability
- DC-DC converters

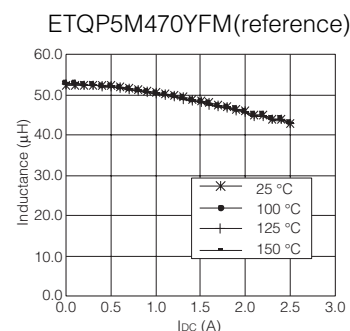
Standard Packing Quantity

- 500 pcs./Reel

Explanation of Part Numbers



● Fig.1 Inductance v.s. DC current, Temp.



Temperature rating

Operating temperature range		Tc : -40 °C to +150 °C(Including self-temperature rise)
Storage condition	After PCB mounting Before PCB mounting	
		Ta : -5 °C to +35 °C 85%RH max.

Standard Parts

Series	Part No.	Inductance *1		Rated current $\Delta T=15K^{*2}$ (A)	Reference current $\Delta T=40K^{*3}$ (A)	DC resistance	
		L0 (μ H)	Tolerance (%)			Typ. (m Ω)	Tolerance (%)
PCC-M0754M	ETQP5M4R7YFM	4.7	±20	2.8	4.5	20.4	±10
	ETQP5M470YFM	48	±20	1.0	1.6	156	±10
PCC-M0854M	ETQP5M2R5YFK	2.45	±20	4.5	7.5	7.6	±10
	ETQP5M220YFK	22	±20	1.6	2.6	63	±10
	ETQP5M470YFK	48	±20	1.1	1.8	125	±10
PCC-M1054M	ETQP5M2R5YFC	2.5	±20	6.0	10	5.3	±10
	ETQP5M3R3YFC	3.3	±20	5.1	8.6	7.1	±10
	ETQP5M4R7YFC	4.7	±20	4.4	7.2	10.2	±10
PCC-M1050M	ETQP5M101YGC	97	±20	1.0	1.6	208	±10

(*1) Inductance is measured at 100 kHz.

(*2) Rated current defines actual value of DC current which is case temperature rise becomes 15 K.

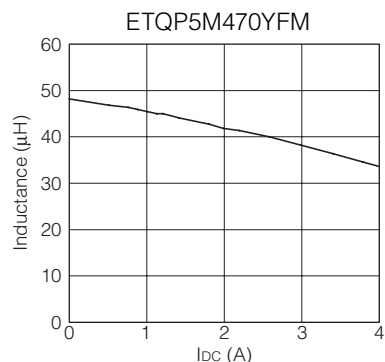
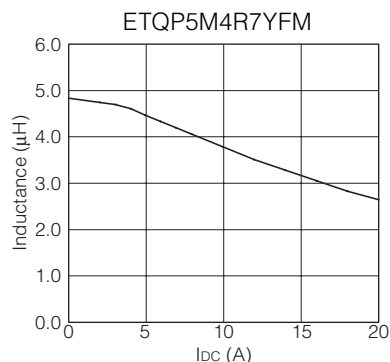
(*3) Reference current defines actual value of DC current which is case temperature rise becomes 40 K.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use.
 Should a safety concern arise regarding this product, please be sure to contact us immediately.

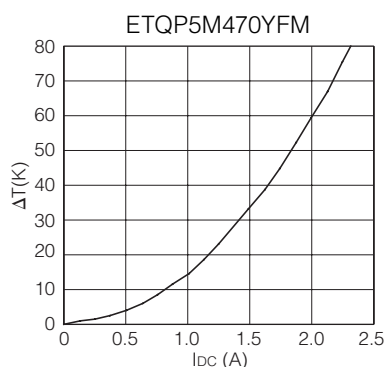
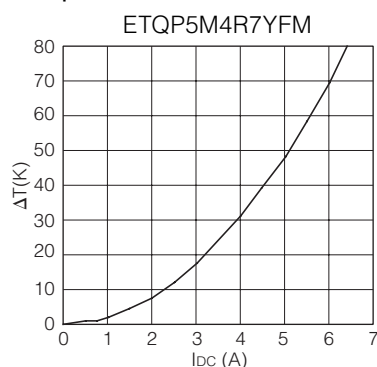
1. PCC-M0754M Series(ETQP5M□□□YFM)

■ Performance Characteristics (Reference)

● Inductance vs DC Current



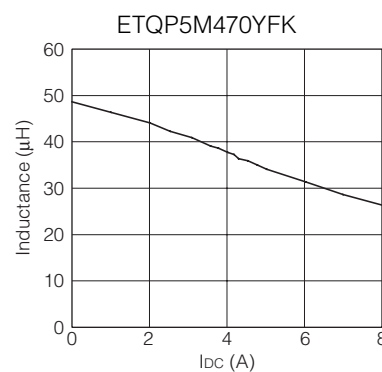
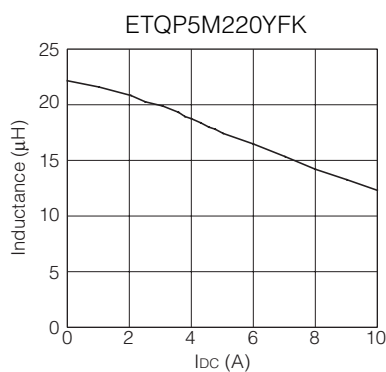
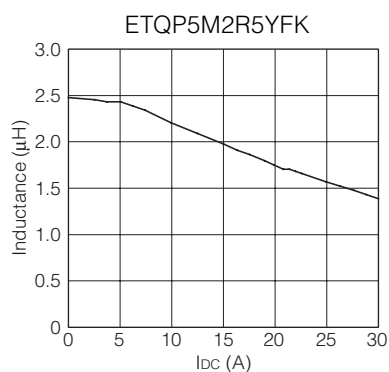
● Case Temperature vs DC Current*



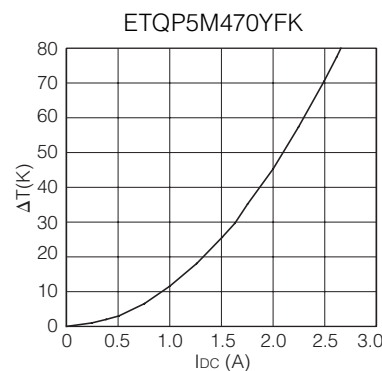
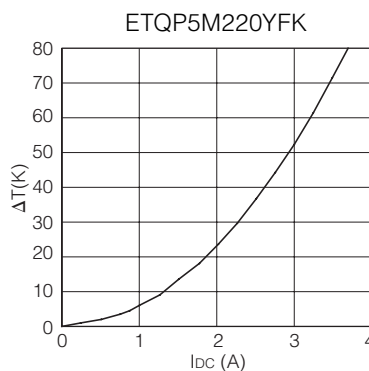
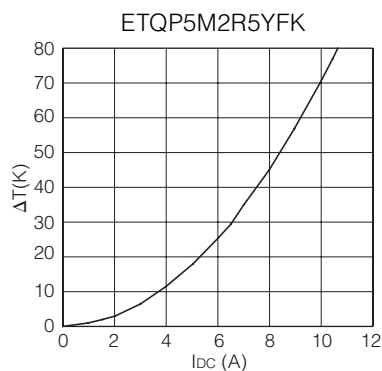
2. PCC-M0854M Series(ETQP5M□□□YFK)

■ Performance Characteristics (Reference)

● Inductance vs DC Current



● Case Temperature vs DC Current*

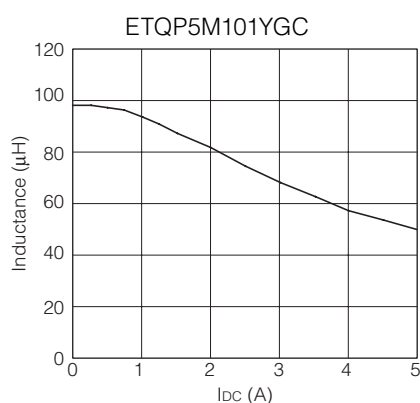
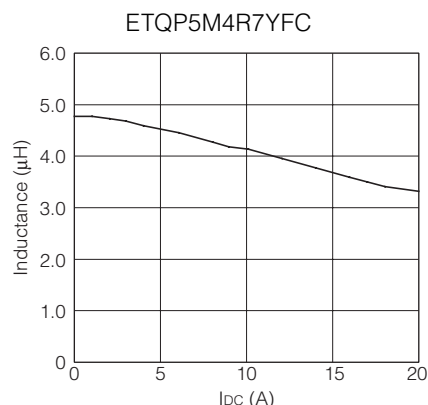
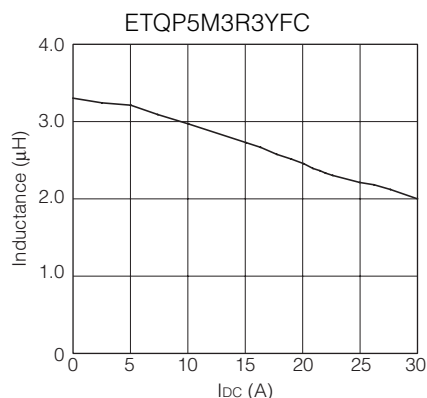
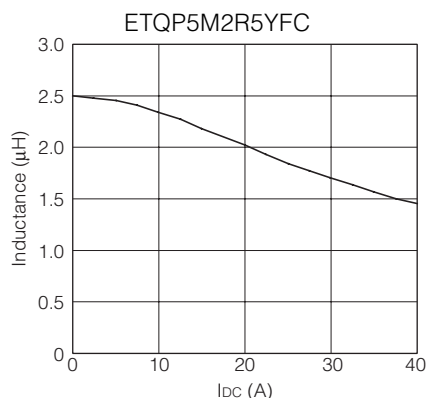


* Above temperature rise is measured at Panasonic standard PCB condition. And actual temperature rise at application have different value due to PCB design and heat dissipation etc. So please confirm it at customer's application.

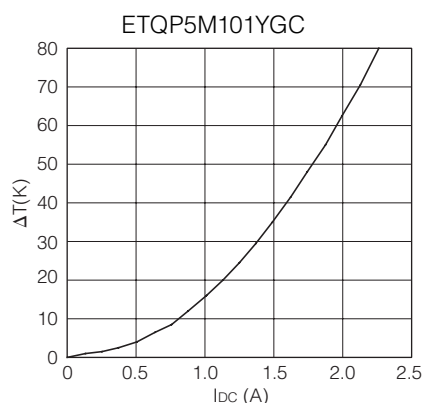
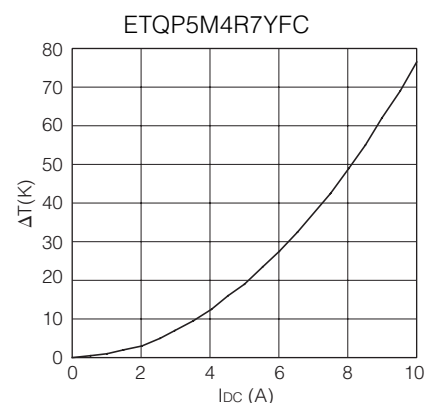
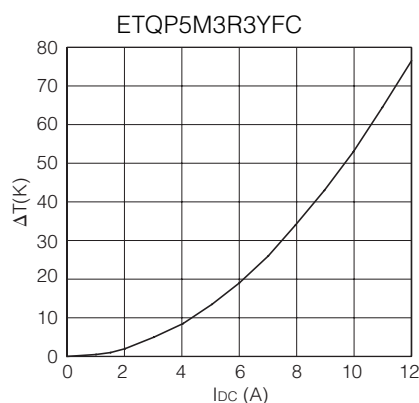
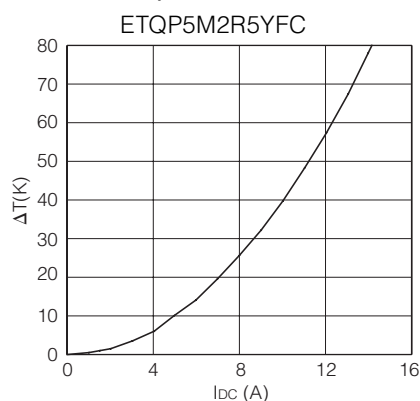
3. PCC-M1054M/PCC-M1050M Series(ETQP5M□□□YFC/ETQP5M□□□YGC)

■ Performance Characteristics (Reference)

● Inductance vs DC Current



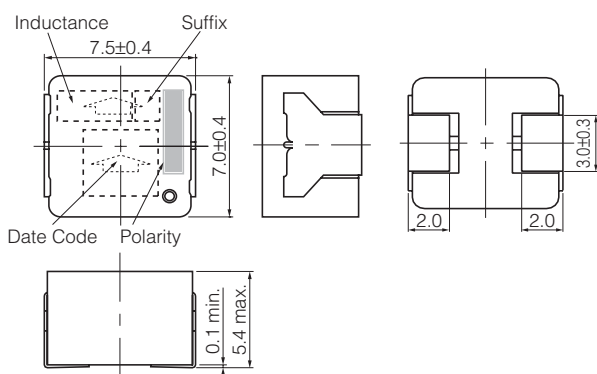
● Case Temperature vs DC Current*



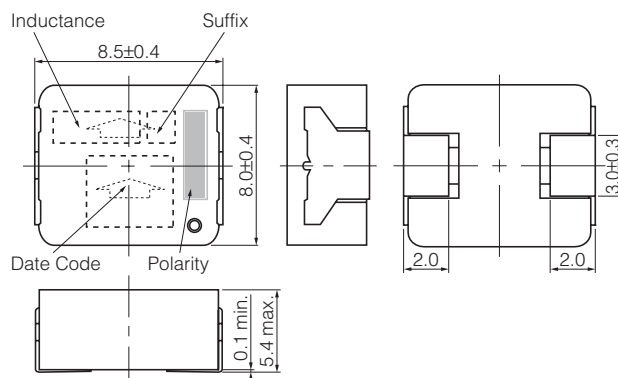
* Above temperature rise is measured at Panasonic standard PCB condition. And actual temperature rise at application have different value due to PCB design and heat dissipation etc. So please confirm it at customer's application.

- Dimensions in mm (not to scale)
Dimensional tolerance unless noted : ± 0.5

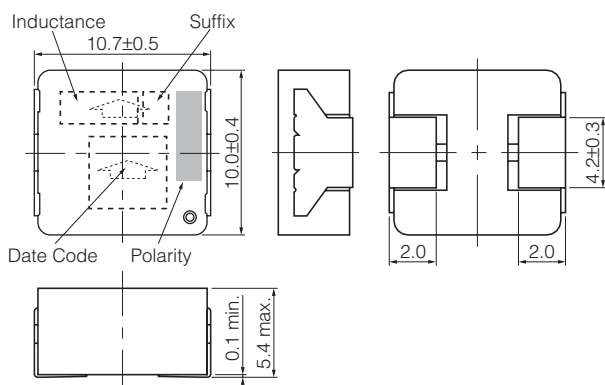
PCC-M0754M Series
(ETQP5M□□□YFM)



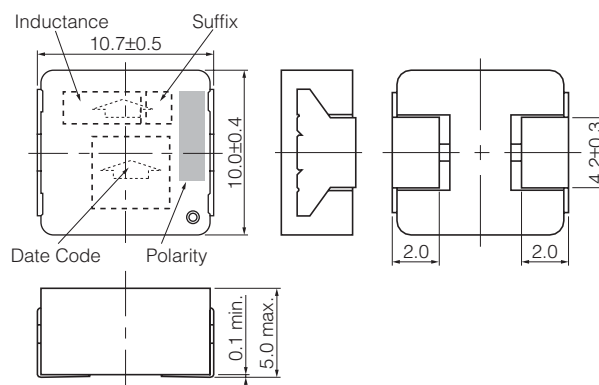
PCC-M0854M Series
(ETQP5M□□□YFK)



PCC-M1054M Series
(ETQP5M□□□YFC)

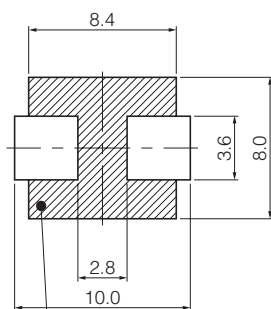


PCC-M1050M Series
(ETQP5M□□□YGC)



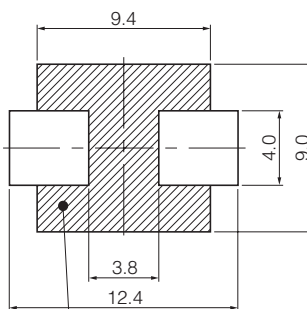
- Recommended Land Pattern in mm (not to scale)
Dimensional tolerance unless noted : ± 0.5

PCC-M0754M Series
(ETQP5M□□□YFM)



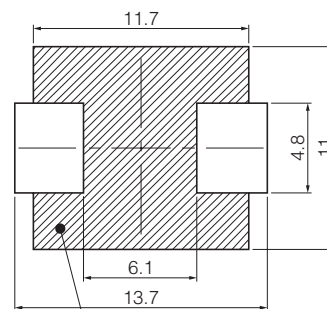
Don't wire on the pattern
on shaded portion the PCB.

PCC-M0854M Series
(ETQP5M□□□YFK)



The same as the left.

PCC-M1054M Series
PCC-M1050M Series
(ETQP5M□□□YFC/YGC)



The same as the left.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.