Power Choke Coil

Series : PCC-M0740L (MC) Low DCR Type

Small mounting size
for multi-phase DC/DC converter circuits

Features

- Small type (8.7×7.0×H4.0 mm)
- High power (17 A to 24 A)
- Low loss (R_{DC} :1.0 to 1.5 mΩ)
- Tighter DCR tolerance (±7 %)
- Suitable for high frequency circuit (up to 1 MHz)
- Low buzz noise due to its gap-less structure
- RoHS compliant
- Shielded construction

Recommended Applications

- Notebook PC power supply modules
- Servers, Routers, DC/DC converters for driving CPUs

Standard Packing Quantity (Minimum Quantity/Packing Unit)

- 3,000 pcs./box (2 reel)

Explanation of Part Numbers

1	2	3	4	5	6	7	8	9	10	11	12
E	T	Q	P	4	L						
Product Code			Classification	Size	Winding	Inductance			Core	Packaging	Suffix

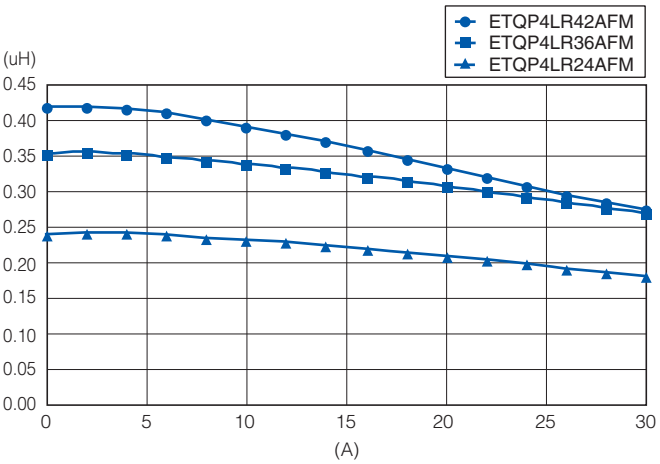
Standard Parts

Part No.	Inductance (at 20 °C)*1			Rated current (A)*2	Rated current (ref) (A)*3	DC resistance (at 20 °C) (mΩ)
	L0 at 0A	L1*4				
	(μH)	(μH)	Measurement current (A)			
ETQP4LR24AFM	0.24±20 %	(0.20)	24	24	35.5	1.00±7 %
ETQP4LR36AFM	0.36±20 %	(0.30)	20	20	31.0	1.35±7 %
ETQP4LR42AFM	0.42±20 %	(0.35)	17	17	28.5	1.50±7 %

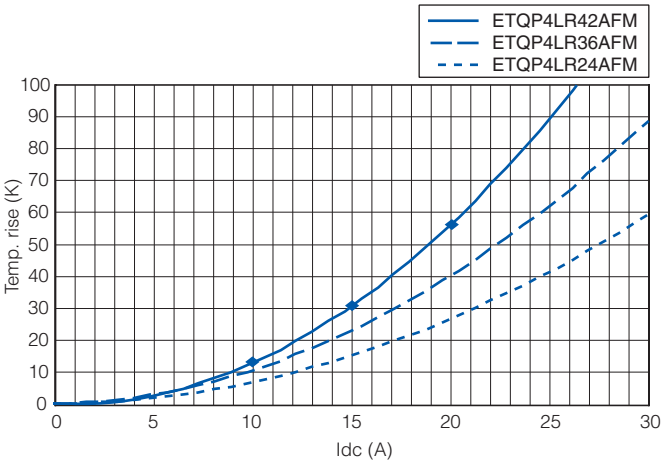
(∗1) Inductance is measured at 1.0 MHz.
(∗2) Rated current defines actual value of DC current, when temperature rise of coil becomes 40 K. (Method A)
(∗3) Rated current defines actual value of DC current, when temperature rise of coil becomes 40 K. (Method B)
(∗4) Reference only
(∗5) Method A (PANASONIC's standard measurement conditions),
Method B (high heat dissipation measurement) is different from Method A by the measurement methods.
In normal application condition, the part's temperature depends on circuit design and heat dissipation condition. This condition shall be verified by the worst operational condition.

Performance Characteristics (Reference)

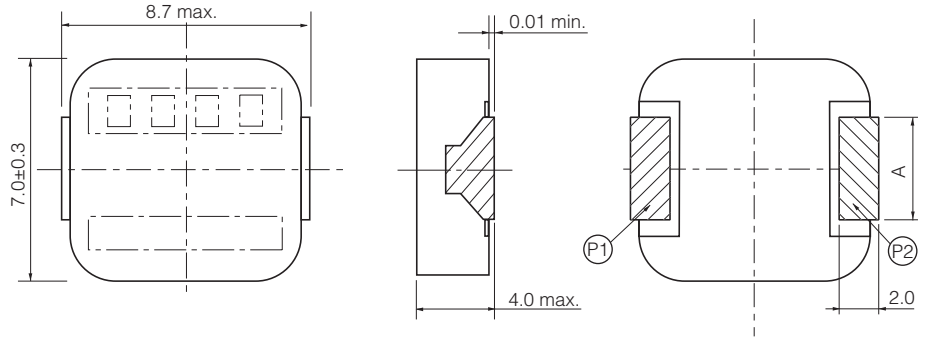
Inductance vs DC Current



Case Temperature vs DC Current (Method A)

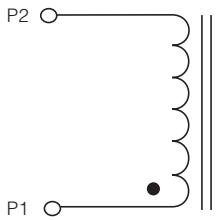


Dimensions in mm (not to scale)

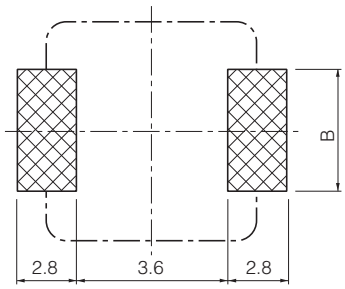


Part No.	A
ETQP4LR24AFM	3.0±0.3
ETQP4LR36AFM	2.0±0.3
ETQP4LR42AFM	

Connection



Recommended land patterns in mm (not to scale)



Part No.	B
ETQP4LR24AFM	3.6
ETQP4LR36AFM	2.6
ETQP4LR42AFM	

■ **As for Packaging Methods, Soldering Conditions and Safety Precautions (Power Choke Coils for Consumer use),**
Please see Data Files