

Power inductors for automotive application

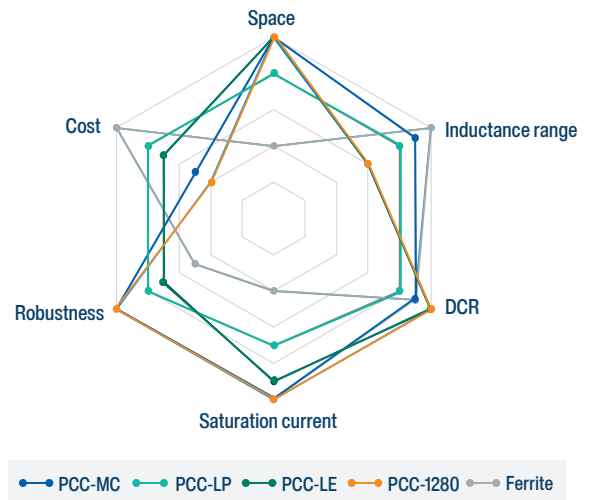
Panasonic Power Choke Coil (PCC) - ETQP*M series

PCC PORTFOLIO

Main series line-up & Comparison

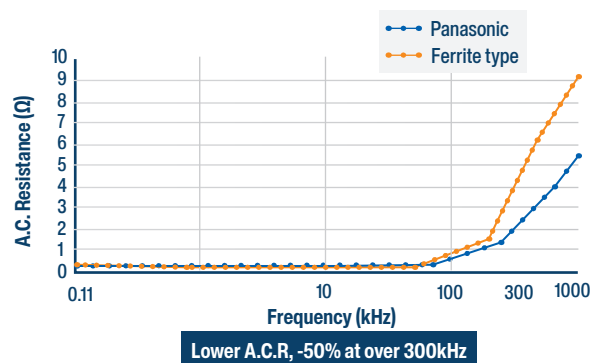
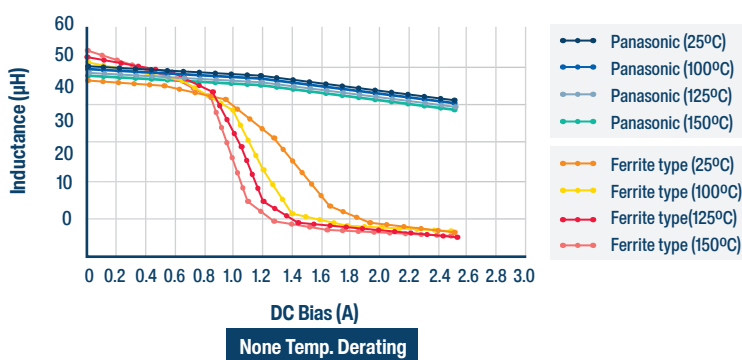


Series	PCC-MC High Perform	PCC-LP Low Profile	PCC-LE LE type	PCC-1280 Large Current
Temperature	-40 ~ +150°C	-55 ~ +155°C	-40 ~ +150°C	-40 ~ +160°C (+180°C in short hrs.)
Inductance range	0.33~100μH	0.33~47μH	3.3~47μH	0.33~4.7μH
Rated current	1.9~39.7A	2.1~23.9A	2.9~9.2A	20.2~53.5A
Package size (mm)	□5.5x5.0x3.0~ □10.9x10.0x6.0	□5.5x5.0x3.0~ □10.7x10.0x4.0	□6.4x6.0x4.8 □7.4x7.0x4.8	□13.2x12.6x8.0
Benefit	<ul style="list-style-type: none"> > High performance > Robust & high stability > High saturation > Low AC-power loss > Vibration up to 50G parts available 	<ul style="list-style-type: none"> > Low profile design > Max 3.0 & 4.0mm height. > Low DCR > Pin layout compatible with IHLP series 	<ul style="list-style-type: none"> > Lower DCR > Less mounting space > Pin to pin compatible with Ferrite type 	<ul style="list-style-type: none"> > High current > Lower DCR > 30G Vibration > ½ package size

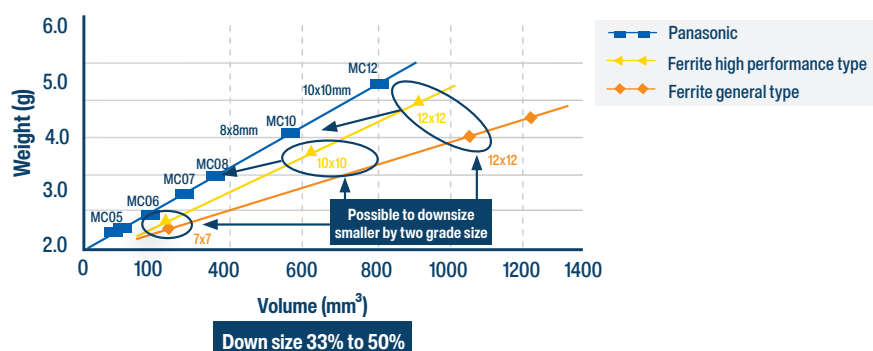


- > Panasonic Power Inductor has a unique metal composite core material, leading to special benefits (e.g. low saturation, low loss at high frequency).
- > Line-up is designed for harsh environment and includes products for up to 180°C temperature and 50G vibration.
- > Line-up ranges from 0.33μH to 100μH at case sizes from 5x5 to 12x12 mm.
- > The above listed inductor line-up complies with AEC-Q200 for automotive use.

PCC OFFERS SUPERIOR BENEFITS COMPARED TO FERRITES



Size Down: Volume/Weight Reduction Effect

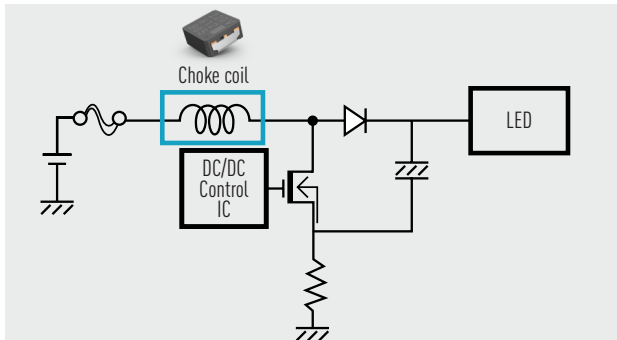


Power inductors for automotive application

Panasonic Power Choke Coil (PCC) - ETQP*M series

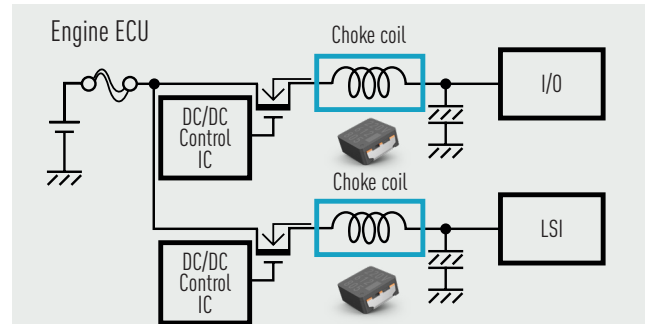
RECOMMENDED APPLICATIONS

DC/DC Choke Coil Applications (LED driver)



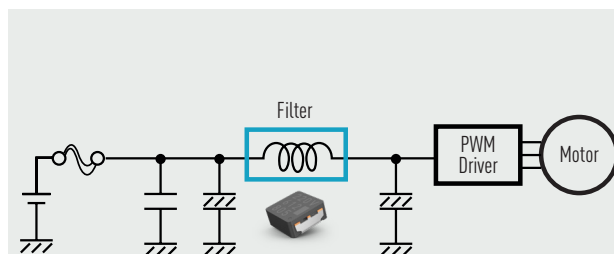
Input Filter/Pai Filter, Storage coil for Boost Converter, Buck Converter, Buck-Boost Converter

DC/DC Buck converter (ECU)



Storage Coil for Boost Converter, Buck Converter, Buck-Boost Converter, and other applications such as Injection Driver Circuit, etc.

Filter Application (Motor drive)



Input Filter/Pai Filter, Output Filter for Inverter Drive Circuit

POWER INDUCTORS FOR AUTOMOTIVE APPLICATION

Panasonic provides design support, including a LC Filter Simulation and Power Loss Tool at the Panasonic Website:

www.industry.panasonic.eu/products/components/inductors-coils

For further information, please contact Inductor@eu.panasonic.com

