

High Current Power Inductor CPQX Series

- Saturation current up to 220A, designed for DC-DC converter, industrial control, renewable energy and other high power solutions.



■ General Description

Codaca electronics introduces the CPQX series of super high current inductors with high saturation, low loss, and quick customization to meet the challenges of power supply systems in high current operating environments. CPQX series adopts magnetic powder core material and flat coil winding design, which provides extremely low DC resistance and core loss, low temperature rise, high efficiency, and the ability to work stably for long periods of time in high current applications. Operating temperature: $-55^{\circ}\text{C} \sim +155^{\circ}\text{C}$.

CPQX series inductors have inductance range from $2.20 \sim 27.0 \mu\text{H}$, DCR $0.65 \sim 5.20\text{m}\Omega$, saturation current $27.0 \sim 220\text{A}$, temperature rise current $21.5 \sim 67.0\text{A}$, and are available in two sizes: $28.0*23.0*18.5(\text{mm})$, $32.0*30.7*18.8(\text{mm})$.

■ Features

- Excellent DC bias capability to handle instantaneous peak current
- Flat wire winding, achieving very low DC resistance
- The inductance value and DC bias characteristic are little affected by temperature
- Magnetic shield structure, strong anti-electromagnetic interference ability
- Operating temperature: $-55^{\circ}\text{C} \sim +155^{\circ}\text{C}$

■ Applications



DC-DC Converter



High Current Switching Regulator



Industrial Control



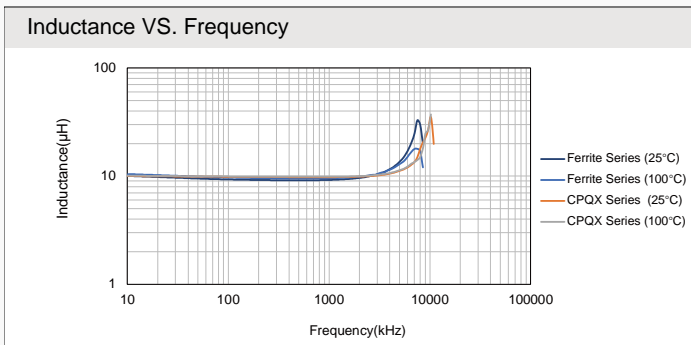
Renewable Energy

Electrical Characteristics

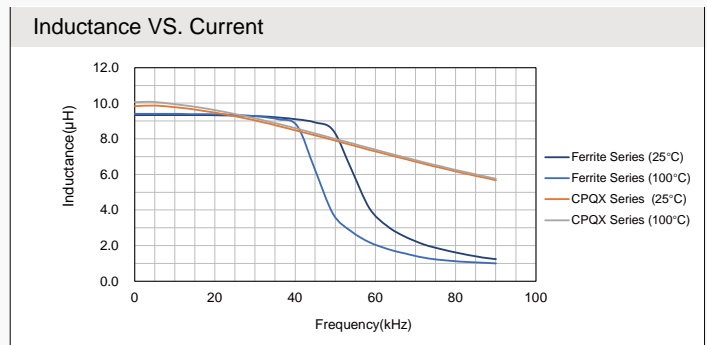
Part No.	Inductance (μH)	D.C.R. (mΩ)	Saturation current (A)	Temperature rise current (A)	Size LxWxH(mm)
CPQX2918H	2.70~12.0	1.40~5.20	85.0~170	21.5~41.0	28.0x23.0x18.5
CPQX2918L	6.50~27.0	1.40~5.20	27.0~55.0	21.5~41.0	28.0x23.0x18.5
CPQX2918S	4.70~18.0	1.40~5.20	43.0~85.0	21.5~41.0	28.0x23.0x18.5
CPQX3218H	2.20~11.0	0.65~3.60	100~220	28.5~67.0	32.0x30.7x18.8
CPQX3218L	5.10~27.0	0.65~3.60	33.0~75.0	28.5~67.0	32.0x30.7x18.8
CPQX3218S	3.30~18.0	0.65~3.60	52.0~118	28.5~67.0	32.0x30.7x18.8

Temperature Stability Test

CPQX series inductance value and saturation current are little affected by temperature. Test data show that at an operating frequency of 3MHz or less, the CPQX series inductance change rate under high temperature conditions (100°C) does not exceed 1%, and the saturation current change rate does not exceed 2.3%.



Inductance Temperature Stability Test



Saturation Current Temperature Stability Test

Quality Management System

- IATF16949
- CNAS laboratory
- ISO9001
- ISO14001
- ISO45001

