

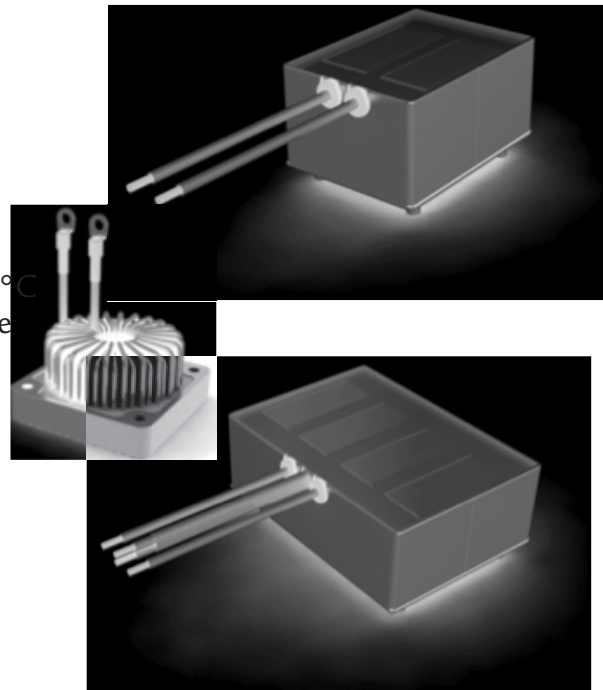
# PFC SERIES

## Power Factor Correction Series

Power Factor Correction Chokes

### Features

- Chokes for CCM PFC operation
- Can be used in a wide range of sinusoidal absorption rectifier circuits
- Mounting onto water-plate heatsinks
- Power rating : 4-10-20kW
- Inductance range : 80 $\mu$ H to 500 $\mu$ H
- Frequency range : 50-100kHz
- H class component for operation up to 180°C
- Very stable performances versus temperature
- No thermal aging effect
- Possibility of customized outputs
- UL94V-0 material
- RoHS compliant



### Applications

- Automotive embedded battery chargers
- Industrial high power SMPS

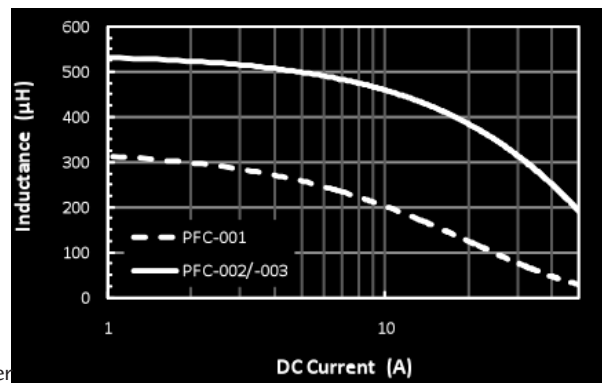
### Electrical specifications

Code	Input Voltage Vac (V)	Output Voltage Vdc (V)	Power (kW)	Freq. (kHz)	L0 <sup>(3)</sup> $\pm 10\%$ ( $\mu$ H)	L MIN <sup>(4)</sup> at Peak Current ( $\mu$ H)	DCR MAX (m $\Omega$ )	Current I <sub>rms</sub> (A)	Ripple $\Delta I_{pp}$ (A)	Losses @100°C (W)	Weight (kg)
PFC-001	230	385	4	67	310	> 80@27A	25	17	6	13	0,4
PFC-002	400	800	10	50	530	> 210@40A	60	25	10	52	1,1
PFC-003 (*)	400	800	20	50	2x 530	> 210@40A	2x 60	2x 25	10	2x 52	2,3

(\*) Dedicated to interleaved PFC topology (double-choke with center-tap)

### Notes

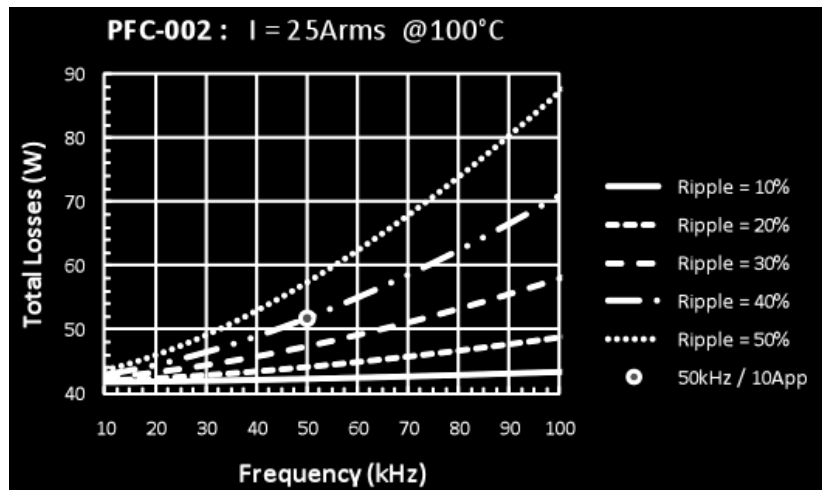
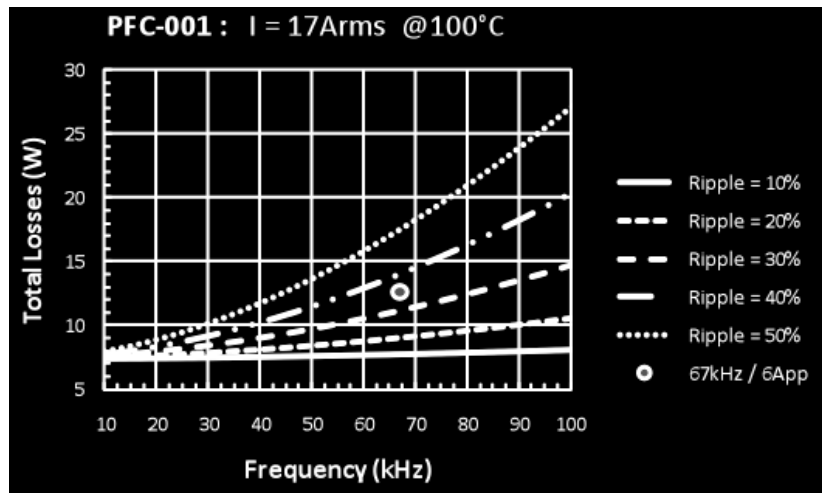
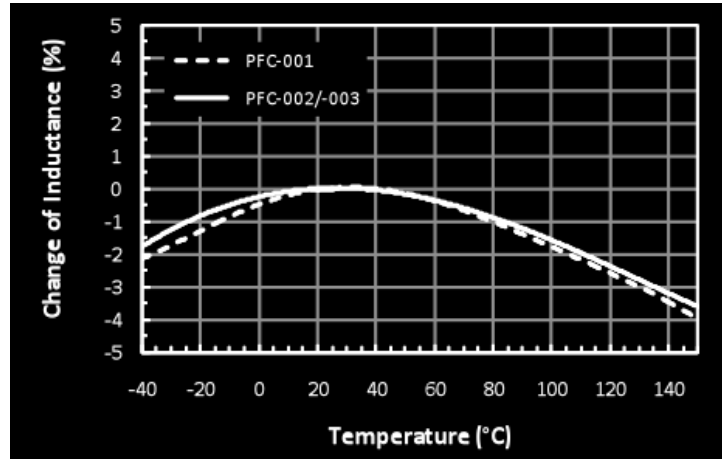
- (1) All test data are referenced to 25°C ambient temperature
- (2) Continuous operating temperature range must be within -40°C/+150°C (ambient + self heating) under worst case conditions ; exposure to 180°C peak is allowed according to IEC85 H thermal index for all raw materials used
- (3) Performances are subjected to change according to cooling capability of the heatsink on which the component is fixed It is suggested that the component be tested at system level to verify its temperature after 60 minutes in the end application Inductance values are measured at 10kHz/0.25V Less than +/-5% variation on -40°C/+150°C temperature range
- (4) See L vs. I<sub>dc</sub> curve beside
- (5) Dielectric strength between windings and aluminum box is greater than 2.5kV/50Hz/2sec



# PFC SERIES

## Power Factor Correction Series

Typical performances versus temperature and frequency



NEW

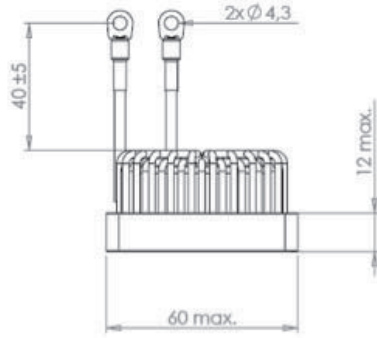
PREMO

# PFC SERIES

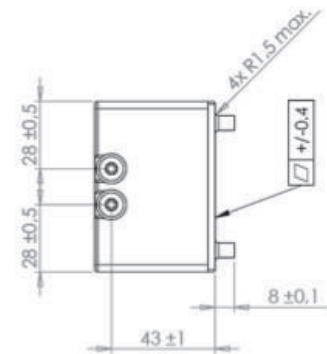
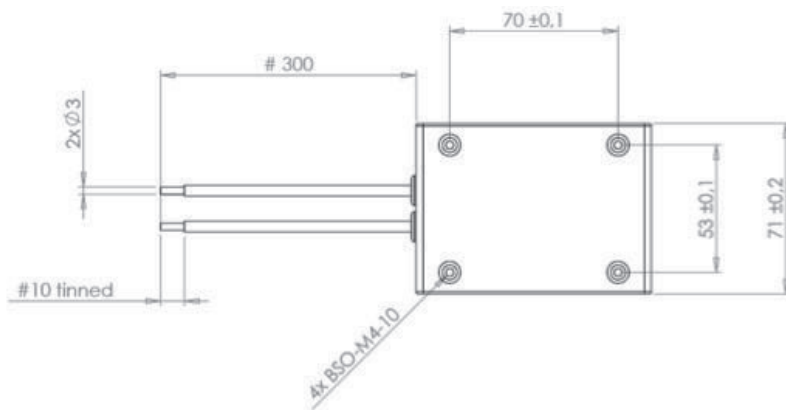
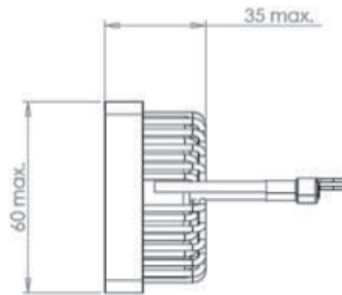
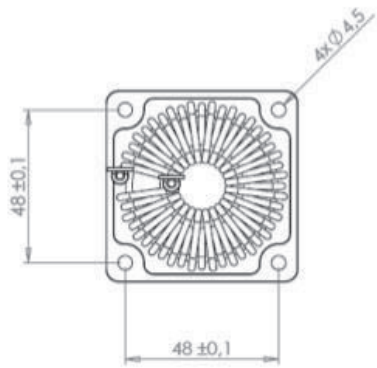
## Power Factor Correction Series

Power Factor Correction Chokes

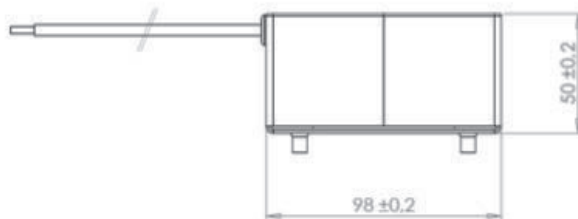
### Dimensions



PFC-001



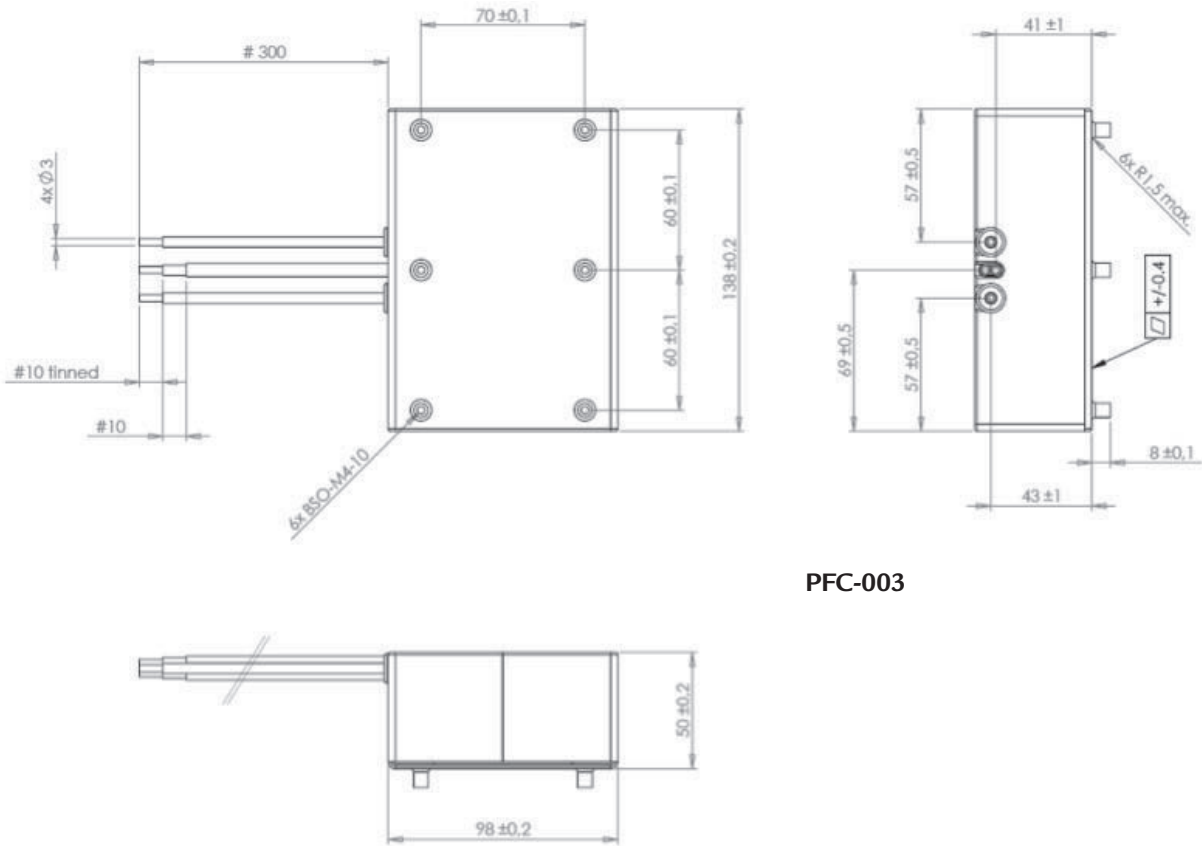
PFC-002



# PFC SERIES

## Power Factor Correction Series

### Dimensions



PFC-003

### Packaging

Antistatic trays with carton grids in carton box