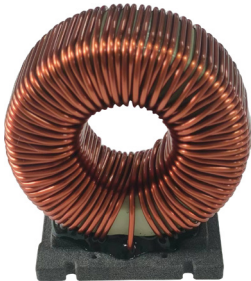


# Power Factor Correction Choke **multicomp**PRO

RoHS  
Compliant



## Features

- Alloy powder based DIP Inductor with lower core loss.
- No thermal aging concerns.
- Low leakage magnetic flux.
- Elimination for impulse (EMI) noise.
- High current output chokes, up to 55.5 Amp with approx. 50% roll off.
- Designed and developed for Power Factor Correction applications.

## Specification

Inductance Range	: 105uH to 1000uH.
Foot Print	: 53.9mm × 31mm max., 60 max. Height.
Surge Voltage	: 400V DC.
Operating Temperature Range	: -55°C to + 130°C.

## Electrical Characteristics

Part Number	OCL <sup>1</sup> (uH) ±10%	DCR (mΩ) Max.	Isat1 <sup>2</sup> (A) @25°C	L@Isat1 <sup>2</sup> (uH) Min.	Isat2 <sup>2</sup> (A) @25°C	L@Isat2 <sup>2</sup> (uH) Min.	Isat3 <sup>2</sup> (A) @25°C	L@Isat3 <sup>2</sup> (uH) Min.	I <sub>rms</sub> <sup>3</sup> (A) @25°C
MPFC546031B-101K	105	14.5	28.3	77.8	37.2	66.7	55.5	46.2	24.3
MPFC546031B-102K	205	20.5	20.3	151.1	26.7	129.5	39.9	89.7	21
MPFC546031B-201K	250	26.5	18.4	183.7	24.2	157.5	36.1	109	17.6
MPFC546031B-251K	350	40	15.5	258.4	20.4	221.6	30.5	153.4	13.7
MPFC546031B-351K	470	54.5	13.4	345.8	17.6	296.5	26.3	205.3	11.7
MPFC546031B-471K	500	57	13	369.7	17.1	317	25.5	219.5	11.5
MPFC546031B-501K	680	74	11.2	500.8	14.6	429.4	21.9	297.3	10
MPFC546031B-681K	820	81	10.1	604.5	13.3	518.3	19.9	358.9	9.5
MPFC546031B-821K	1000	106.5	9.2	734.8	12.1	630.1	18	436.3	8.3

### Notes:

1. Open Circuit Inductance (OCL) and L@Isat are measured at 100KHz, 0.25V@ 25°C.
2. Isat1: DC current that causes inductance to drop 20%(Typ.) from OCL (Ta=25°C).  
Isat2: DC current that causes inductance to drop 30%(Typ.) from OCL (Ta=25°C).  
Isat3: DC current that causes inductance to drop 50%(Typ.) from OCL (Ta=25°C).
3. I<sub>rms</sub>: DC current that causes an approximate temperature rise (ΔT) of 40°C (Ta=25°C).

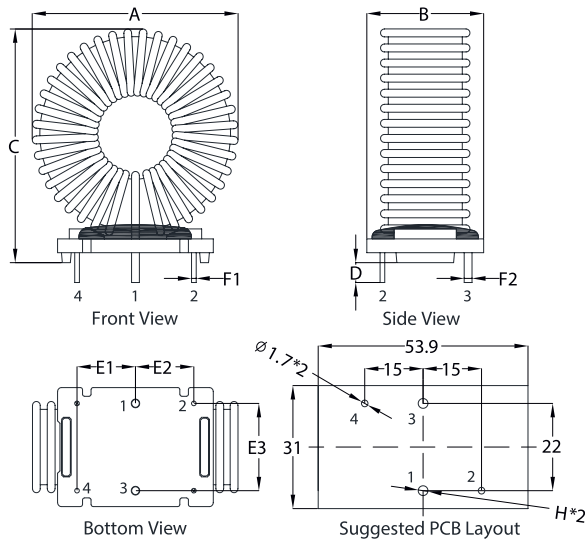
Newark.com/multicomp-pro  
Farnell.com/multicomp-pro  
sg.element14.com/b/multicomp-pro

**multicomp**PRO

# Power Factor Correction Choke **multicomp**PRO

## Mechanical Dimension

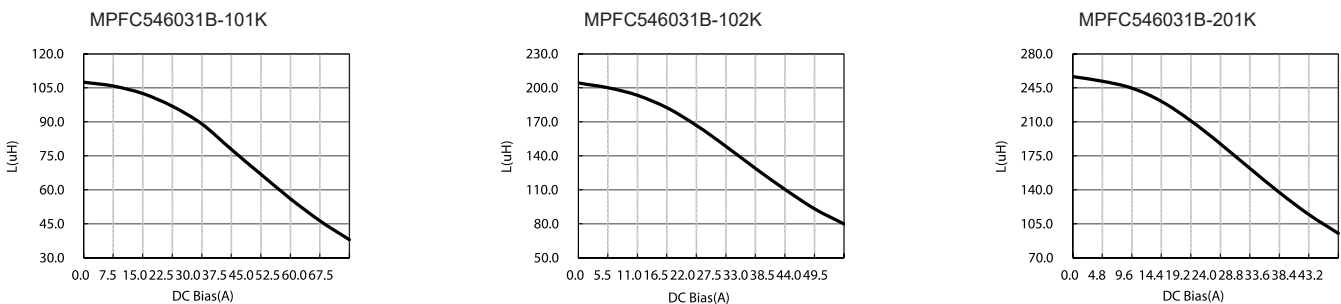
Part Number	Dim. A (mm) Max.	Dim. B (mm) Max.	Dim. C (mm) Max.	Dim. D (mm) $\pm 0.5$	Dim. E1 (mm) $\pm 0.5$	Dim. E2 (mm) $\pm 0.5$	Dim. E3 (mm) $\pm 0.5$	Dim. F1 (mm) $\pm 0.1$	Dim. F2 (mm) $\pm 0.1$	Dim. H (mm) Ref.
MPFC546031B-101K	53.9	31	60	5	15	15	22	$\Phi 1.2$	$\Phi 2$	$\Phi 2.6$
MPFC546031B-102K									$\Phi 2$	$\Phi 2.6$
MPFC546031B-201K									$\Phi 1.8$	$\Phi 2.4$
MPFC546031B-251K	52.5	31	59	5	15	15	22	$\Phi 1.2$	$\Phi 1.5$	$\Phi 2.1$
MPFC546031B-351K									$\Phi 1.4$	$\Phi 2$
MPFC546031B-471K									$\Phi 1.4$	$\Phi 2$
MPFC546031B-501K	52	31	58.5	5	15	15	22	$\Phi 1.2$	$\Phi 1.3$	$\Phi 1.9$
MPFC546031B-681K									$\Phi 1.3$	$\Phi 1.9$
MPFC546031B-821K									$\Phi 1.2$	$\Phi 1.8$



Dimensions : Millimetres

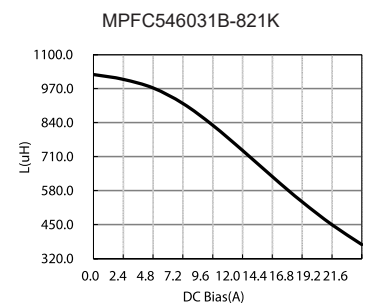
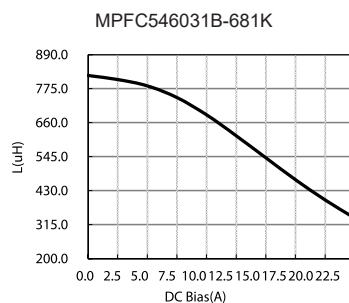
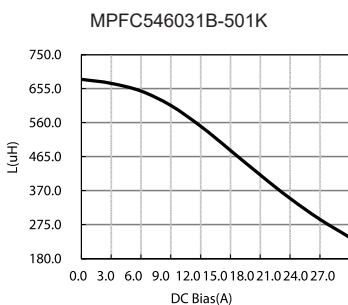
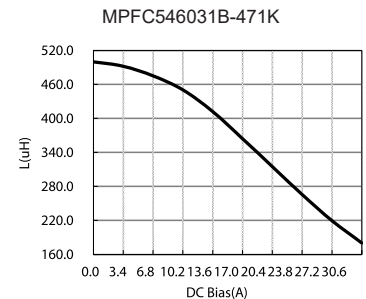
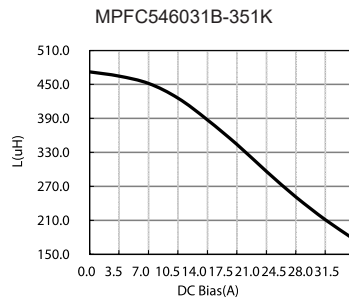
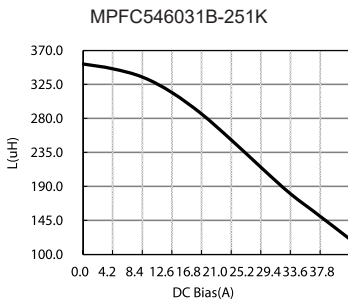
Note: PIN2 & PIN4 provided for mounting stability only.

## Inductance vs. Current Characteristics



Newark.com/multicomp-pro  
 Farnell.com/multicomp-pro  
 sg.element14.com/b/multicomp-pro

**multicomp**PRO



## Part Number Table

Description	Part Number
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 100uH	MPFC546031B-101K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 200uH	MPFC546031B-102K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 250uH	MPFC546031B-201K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 350uH	MPFC546031B-251K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 470uH	MPFC546031B-351K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 560uH	MPFC546031B-471K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 690uH	MPFC546031B-501K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 821uH	MPFC546031B-681K
Power Factor Correction Choke, Foot height 53.9mm × 31mm, 1000uH	MPFC546031B-821K

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.