High current Power Inductor: MCP2016D sereis



MCP2016D series $(2.0 \times 1.6 \times 1.0 \text{mm max})$

Specifications

Features

- 2.0x1.6 mm and 1.0 mm in height (compact size): CAE and fine printing technology made this compact size possible
- Stable minimum DC resistance in the class
- High speed mounting: Using SMT mounter makes less than a second mounting possible
- · Excellent mounting strength by SMD chip making
- Reduced noise over 2/3 of coil inductor by optimal design of
- Completely lead-free product and support lead-free solder

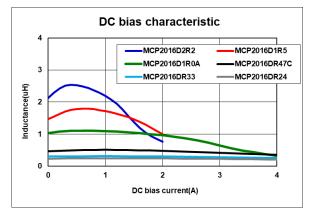
Applications

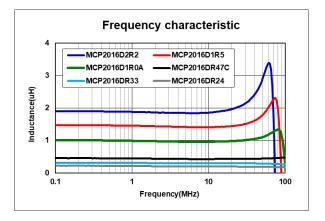
 DC-DC converters and power modules used for the following equipments. Compact electrical instruments Smartphones, Tablet, Ultrabook, DSC, DVC, PDA, DVD and HDD.

Product name	MCP2016D					
	2R2	1R5	1R0A	R47C	R33	R24
Inductance(μH) at 1MHz	2.2 <u>+</u> 20%	1.5 <u>+</u> 20%	1.0 <u>+</u> 20%	0.47 <u>+</u> 20%	0.33 <u>+</u> 20%	0.24 <u>+</u> 20%
DC resistance(Ohm) Typ. (Max.)	0.160	0.120	0.075	0.033	0.030	0.020
	(0.208)	(0.156)	(0.097)	(0.042)	(0.039)	(0.026)
Rated current(A)_1* Typ. (Max.)	1.7	2.0	2.8	3.8	4.0	4.2
	(1.5)	(1.7)	(2.2)	(3.5)	(3.7)	(3.9)
Rated current(A)_2* Typ. (Max.)	1.4	1.9	2.8	4.1	5.1	5.6
	(1.1)	(1.5)	(2.5)	(3.7)	(4.7)	(5.0)

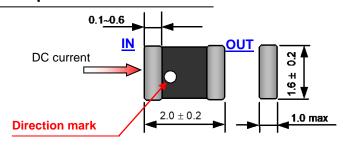
Rated current_1*: In case temperature rise to 40°C due to self-heating.

Operating temperature range: -40~85°C Rated current 2*: The saturation current: L=-30% down from initial L value.



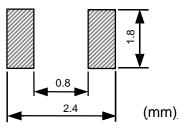


Shapes and Dimensions



This inductor has polarity.

Recommended land pattern



When you use this inductor, be sure to connect positive to the side of direction marker.

Standard package: Emboss taping (reel)

■ The description in this catalogue is subject to change without notice.

As of Aug, 2021