SMD Power Inductor
CDPQ2010

RoHS

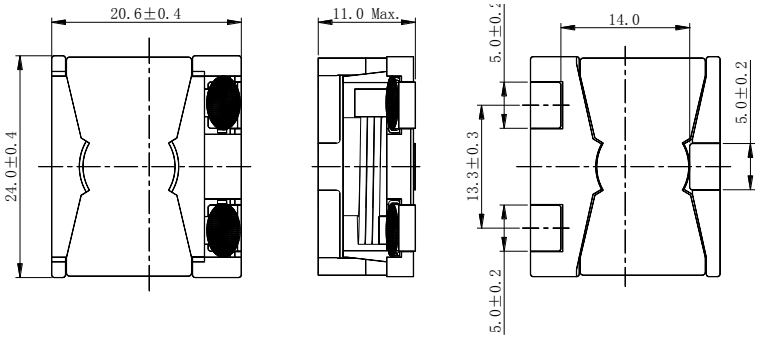
Description
- Ferrite core construction.
- Magnetically shielded.
- L × W × H: 24.4 × 21.0 × 11.0 mm Max.
- Product weight:15.8 g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.

Environmental Data
- Operating temperature range: -40℃～+125℃ (including coil's self temperature rise)
- Storage temperature range: -40℃～+125℃
- Solder reflow temperature: 260 ℃ peak.

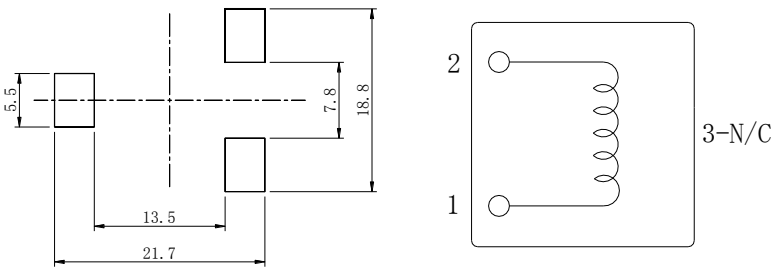
Packaging
- Pallet packaging.

Applications
- Power supply of portable base station, +48Vdc input environment power supply used for industrial instrument.

Dimension - [mm]



Land pattern and Schematics - [mm]



Revised: 10-Jan-17

Electrical Characteristics - 1

NO.	Part No.	Stamp	Inductance (μH) [Within] ※1	D.C.R. (mΩ) [Max.] (at 20℃)	The saturation current (A) ※2		Temperature rise current (A) ※3
					20℃	125℃	
01	CDPQ2010NP-2R7M-160	2R7MH	2.7±20%	2.00(1.65)	29.2(36.5)	20.4(25.5)	21.0
02	CDPQ2010NP-3R9M-160	3R9MH	3.9±20%	2.40(2.00)	23.5(29.4)	16.4(20.5)	20.0
03	CDPQ2010NP-5R6M-160	5R6MH	5.6±20%	3.45(2.85)	19.2(24.0)	13.2(16.6)	17.0
04	CDPQ2010NP-7R5M-160	7R5MH	7.5±20%	4.68(3.90)	17.0(21.3)	11.8(14.8)	14.0
05	CDPQ2010NP-100M-160	100MH	10±20%	5.80(4.85)	14.6(18.3)	10.1(12.7)	12.6

Electrical Characteristics - 2

NO.	Part No.	Stamp	Inductance (μH) [Within] ※1	D.C.R. (mΩ) [Max.] (at 20℃)	The saturation current (A) ※2		Temperature rise current (A) ※3
					20℃	125℃	
06	CDPQ2010NP-3R9M-250	3R9MS	3.9±20%	2.00(1.65)	19.0(23.8)	13.2(16.6)	21.0
07	CDPQ2010NP-6R2M-250	6R2MS	6.2±20%	2.40(2.00)	15.7(19.6)	11.0(13.7)	20.0
08	CDPQ2010NP-8R8M-250	8R8MS	8.8±20%	3.45(2.85)	12.4(15.5)	8.7(10.9)	17.0
09	CDPQ2010NP-120M-250	120MS	12±20%	4.68(3.90)	10.8(13.5)	7.5(9.4)	14.0
10	CDPQ2010NP-150M-250	150MS	15±20%	5.80(4.85)	9.7(12.1)	6.6(8.3)	12.6

Electrical Characteristics - 3

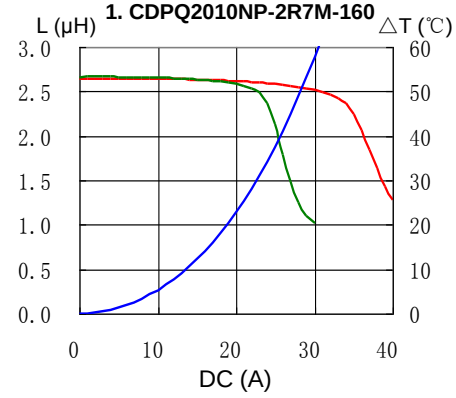
NO.	Part No	Stamp	Inductance (μH) [Within] ※1	D.C.R. (mΩ) [Max.] (at 20℃)	The saturation current (A) ※2		Temperature rise current (A) ※3
					20℃	125℃	
11	CDPQ2010NP-4R7M-300	4R7ML	4.7±20%	2.00(1.65)	15.6(19.5)	11.0(13.8)	21.0
12	CDPQ2010NP-7R5M-300	7R5ML	7.5±20%	2.40(2.00)	12.3(15.4)	8.6(10.7)	20.0
13	CDPQ2010NP-100M-300	100ML	10±20%	3.45(2.85)	10.3(12.9)	7.0(8.8)	17.0
14	CDPQ2010NP-140M-300	140ML	14±20%	4.68(3.90)	9.8(12.3)	6.9(8.6)	14.0
15	CDPQ2010NP-180M-300	180ML	18±20%	5.80(4.85)	7.7(9.6)	5.3(6.7)	12.6

※1. Inductance measuring condition: at 100kHz.
※2. Saturation current: The value of D.C. current when the inductance decreases to 75% of it's nominal value.
※3. Temperature rise current: The value of D.C. current when the temperature rise is △t=25℃(Ta=20℃).

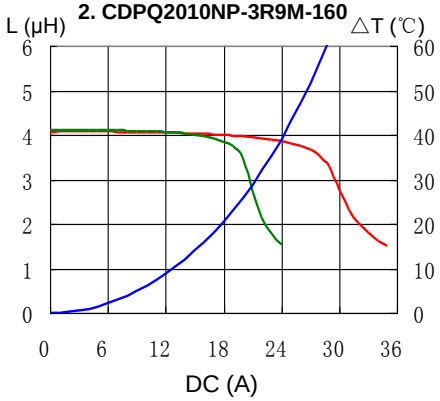
Saturation Current & Temperature Rise Graph

L (20℃) L (125℃) △T

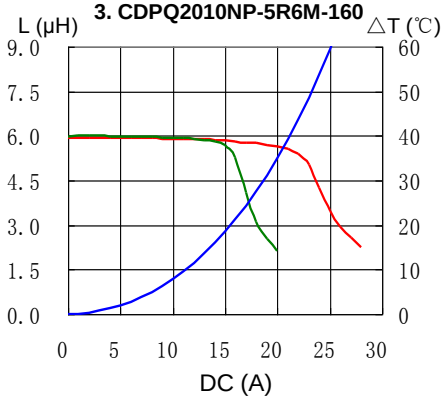
1. CDPQ2010NP-2R7M-160



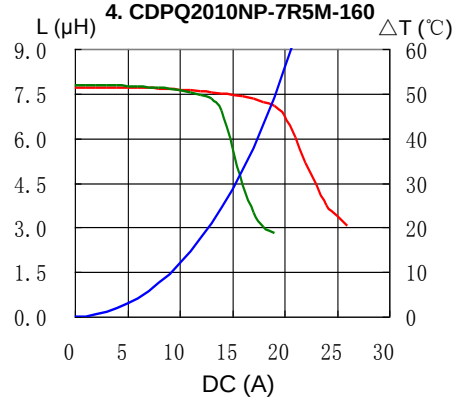
2. CDPQ2010NP-3R9M-160



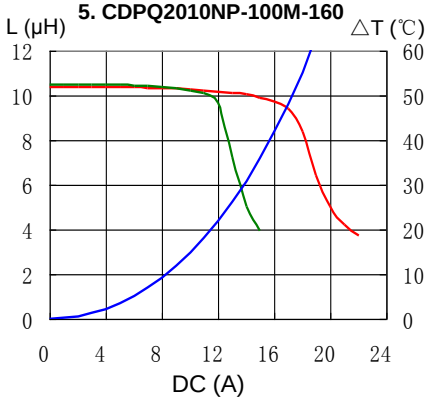
3. CDPQ2010NP-5R6M-160



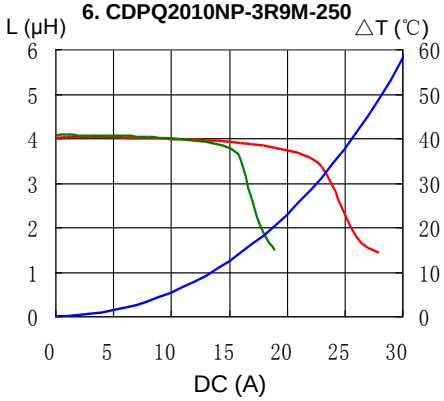
4. CDPQ2010NP-7R5M-160



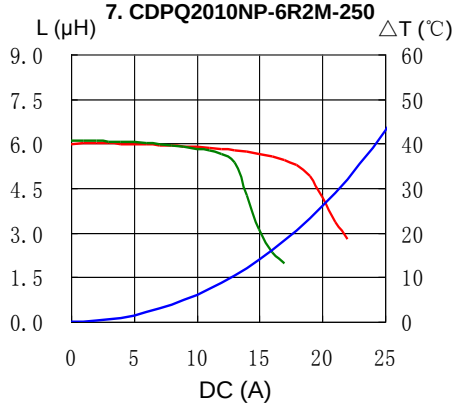
5. CDPQ2010NP-100M-160



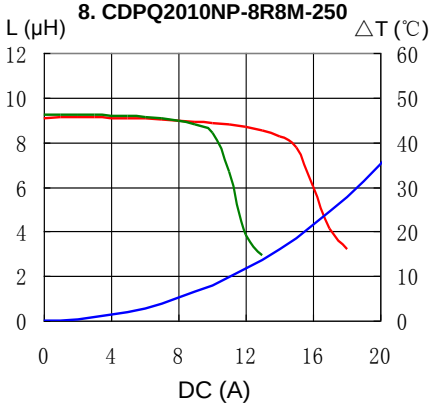
6. CDPQ2010NP-3R9M-250



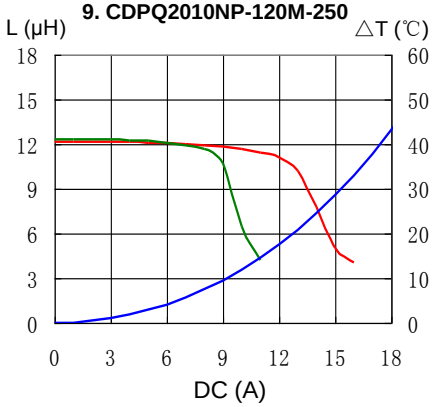
7. CDPQ2010NP-6R2M-250



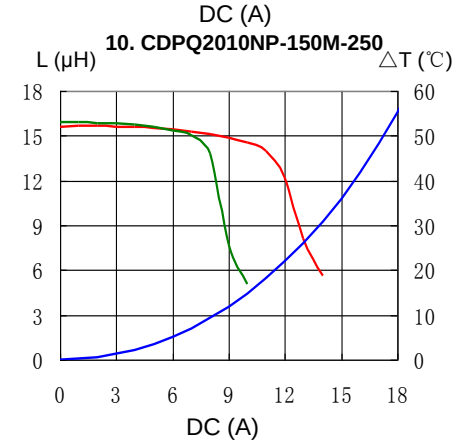
8. CDPQ2010NP-8R8M-250



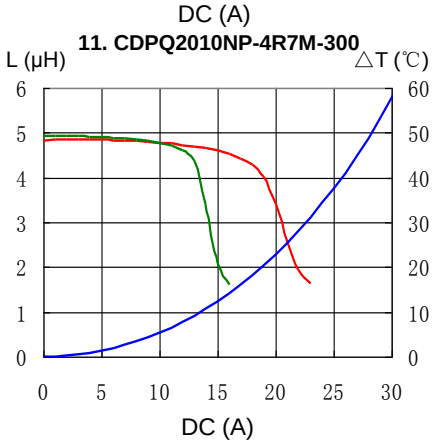
9. CDPQ2010NP-120M-250



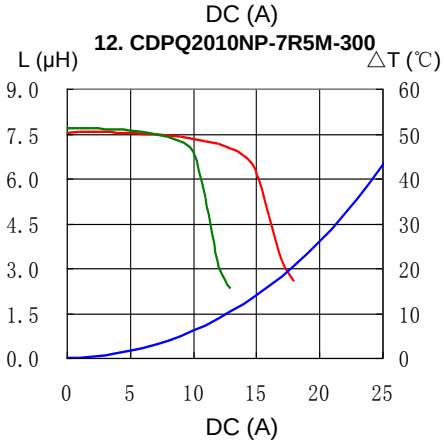
10. CDPQ2010NP-150M-250



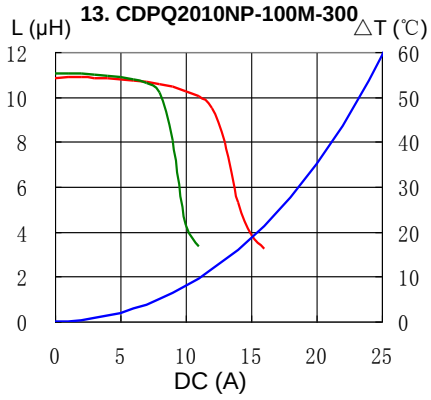
11. CDPQ2010NP-4R7M-300

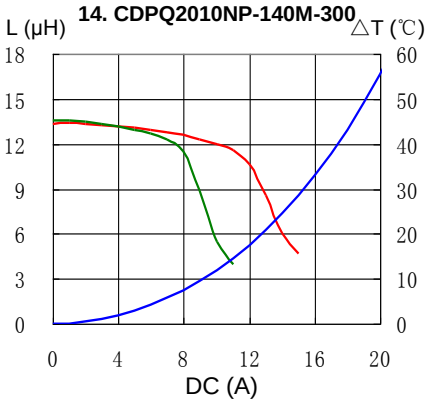


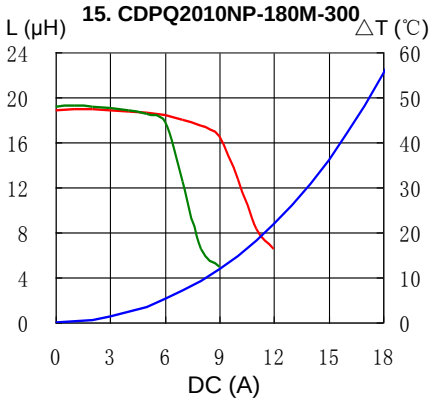
12. CDPQ2010NP-7R5M-300



Saturation Current & Temperature Rise Graph







Solder Reflow Condition