CDRR107NP-181MC Datasheet

DiGi Electronics Part Number	CDRR107NP-181MC-DG
Manufacturer	Sumida America Components Inc.
Manufacturer Product Number	CDRR107NP-181MC
Description	INDUCTOR
Detailed Description	180 µH Shielded Drum Core Inductor 1.16 A 250mOhm Max Nonstandard

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RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
CDRR107NP-181MC	Sumida America Components Inc.
Series:	Product Status:
CDRR107	Active
Type:	Material - Core:
Drum Core	Ferrite
Inductance:	Tolerance:
180 µH	±20%
Current Rating (Amps):	Current - Saturation (Isat):
1.16 A	940mA
Shielding:	DC Resistance (DCR):
Shielded	250mOhm Max
Q @ Freq:	Frequency - Self Resonant:
-	-
Ratings:	Operating Temperature:
AEC-Q200	-40°C ~ 125°C
Inductance Frequency - Test:	Features:
100 kHz	-
Mounting Type:	Package / Case:
Surface Mount	Nonstandard
Supplier Device Package:	Size / Dimension:
-	0.433" L x 0.433" W (11.00mm x 11.00mm)
Height - Seated (Max):	
0.394" (10.00mm)	

SMD Power Inductor
CDRR107

RoHS

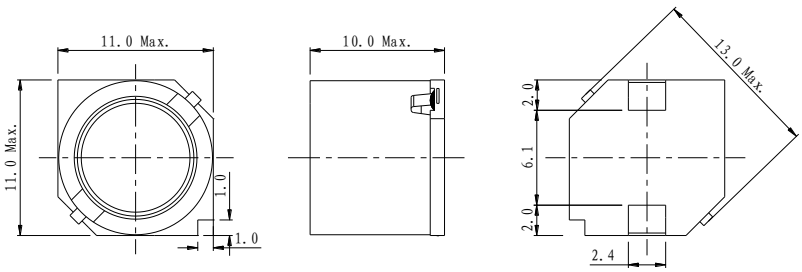
Description
- Ferrite drum core construction.
- Magnetically shielded.
- L × W × H: 11.0 × 11.0 × 10.0 mm Max.
- Product weight:2.7g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Qualification to AEC-Q200.

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

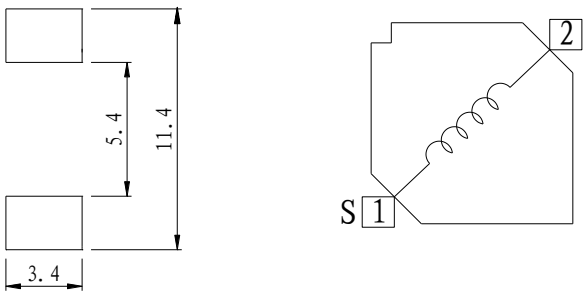
Packaging
- Carrier tape and reel packaging
- 13.0"diameter reel
- 300pcs per reel

Applications
- For consumer electronics :HDD, personal computer, LCD display, etc.
- For automotive: ABS, SRS airbag, HID/LED, ca audio, car navigation, LCD display, etc.

Dimension - [mm]



Land pattern and Schematics - [mm]



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Electrical Characteristics

Part Number	Stamp	Inductance (μH) [within] ※1	D.C.R. (Ω) Max. (Typ.) (at 20℃)	DC Saturation Current (A) ※2		Temperature Rise Current (A) ※3
				(at 20℃)	(at 125℃)	
CDRR107NP-101MC	101	100±20%	0.19(0.15)	1.23(1.54)	0.85(1.06)	1.40(1.60)
CDRR107NP-121MC	121	120±20%	0.20(0.16)	1.14(1.43)	0.72(0.90)	1.34(1.52)
CDRR107NP-151MC	151	150±20%	0.22(0.18)	1.02(1.28)	0.67(0.84)	1.26(1.44)
CDRR107NP-181MC	181	180±20%	0.25(0.20)	0.94(1.18)	0.65(0.81)	1.16(1.33)
CDRR107NP-221MC	221	220±20%	0.27(0.22)	0.86(1.07)	0.58(0.71)	0.98(1.12)
CDRR107NP-271MC	271	270±20%	0.39(0.31)	0.78(0.97)	0.53(0.66)	0.89(1.01)
CDRR107NP-331MC	331	330±20%	0.49(0.39)	0.72(0.90)	0.46(0.58)	0.81(0.92)
CDRR107NP-391MC	391	390±20%	0.54(0.43)	0.66(0.82)	0.44(0.55)	0.80(0.91)
CDRR107NP-471MC	471	470±20%	0.68(0.55)	0.58(0.73)	0.40(0.50)	0.68(0.77)
CDRR107NP-561MC	561	560±20%	0.86(0.69)	0.52(0.65)	0.36(0.45)	0.60(0.69)
CDRR107NP-681MC	681	680±20%	1.0(0.80)	0.47(0.59)	0.34(0.42)	0.59(0.67)
CDRR107NP-821MC	821	820±20%	1.10(0.89)	0.45(0.56)	0.30(0.38)	0.55(0.63)
CDRR107NP-102MC	102	1000±20%	1.43(1.15)	0.40(0.50)	0.28(0.36)	0.47(0.53)
CDRR107NP-122MC	122	1200±20%	1.60(1.25)	0.37(0.47)	0.25(0.32)	0.44(0.50)
CDRR107NP-152MC	152	1500±20%	2.10(1.70)	0.34(0.42)	0.20(0.25)	0.38(0.43)
CDRR107NP-182MC	182	1800±20%	2.30(1.90)	0.30(0.37)	0.20(0.25)	0.34(0.40)

※1. Measuring condition: at 100 kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of it's nominal value.

※3. Temperature rise current: The value of D.C. current when the temperature rise is △t＝40℃(Ta＝20℃).

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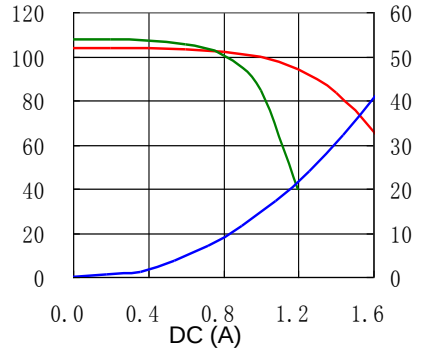
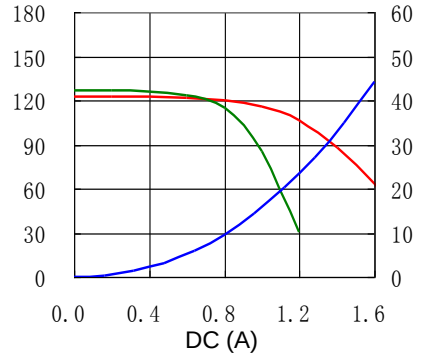
Saturation Current & Temperature Rise Graph

L (20℃) L (125℃) △T

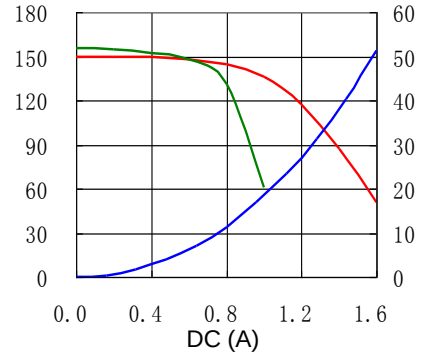
1. CDRR107NP-101MC



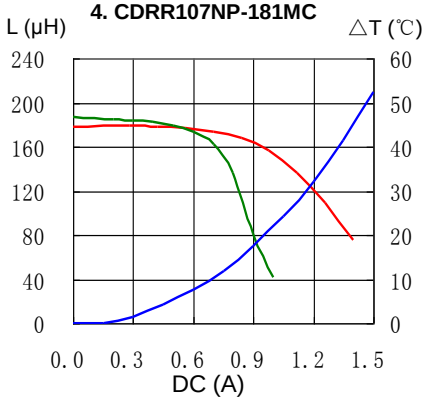
2. CDRR107NP-121MC



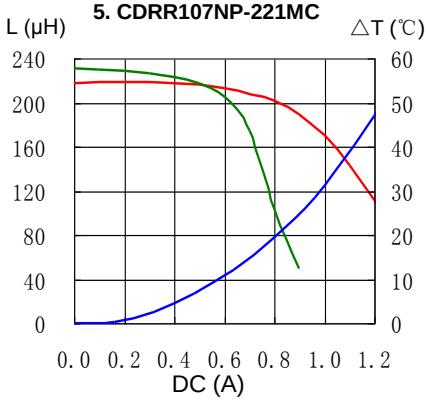
3. CDRR107NP-151MC



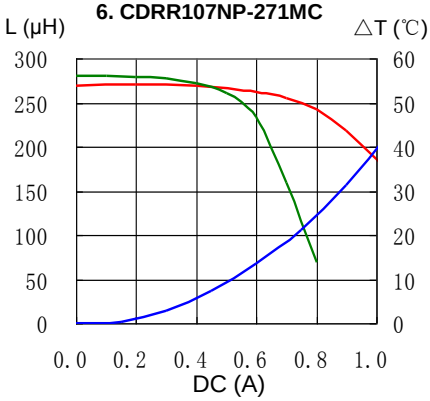
4. CDRR107NP-181MC



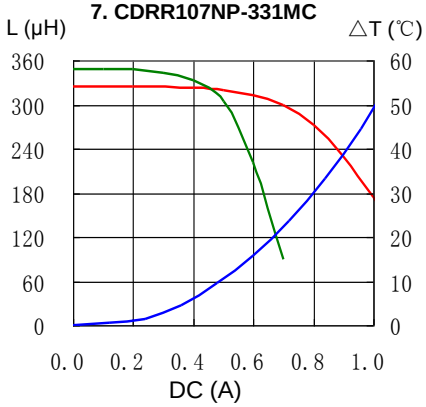
5. CDRR107NP-221MC



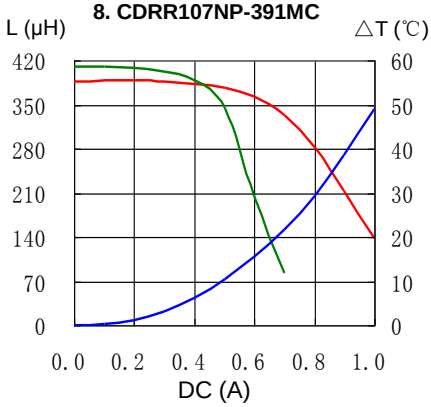
6. CDRR107NP-271MC



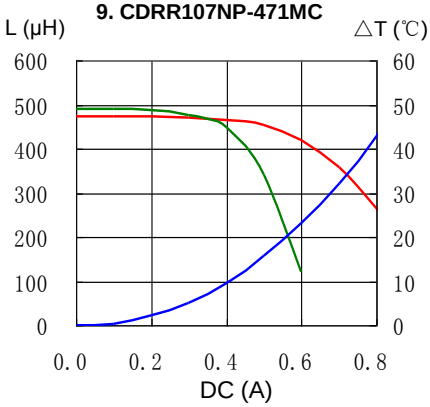
7. CDRR107NP-331MC



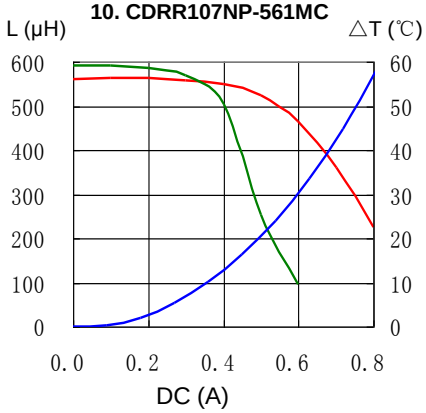
8. CDRR107NP-391MC



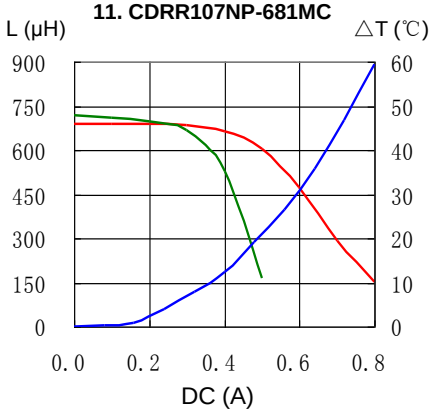
9. CDRR107NP-471MC



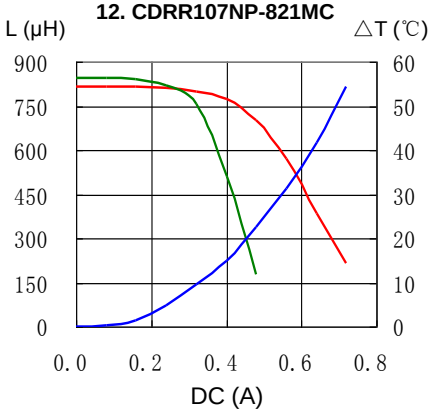
10. CDRR107NP-561MC



11. CDRR107NP-681MC



12. CDRR107NP-821MC



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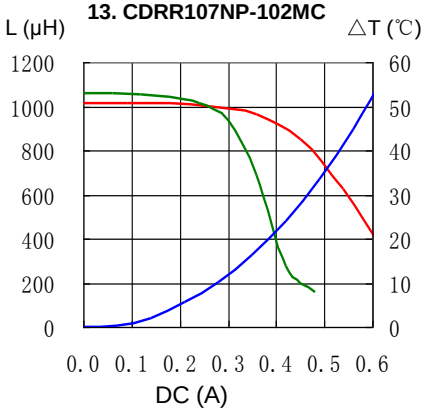
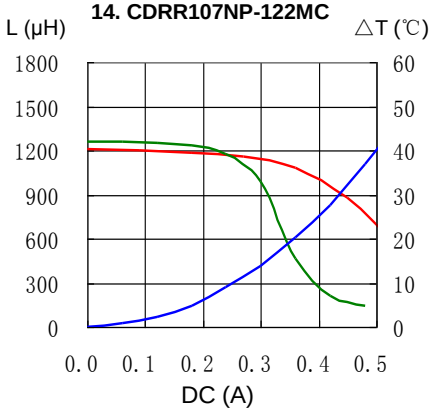
Saturation Current & Temperature Rise Graph

L (20℃) L (125℃) △T

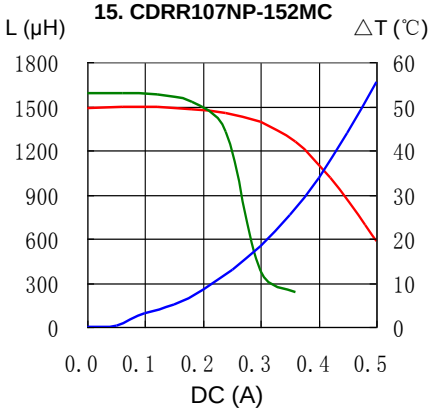
13. CDRR107NP-102MC



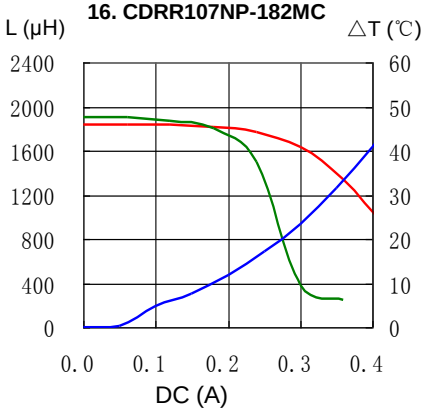
14. CDRR107NP-122MC



15. CDRR107NP-152MC

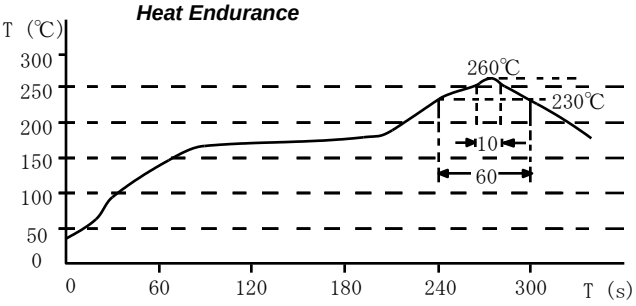


16. CDRR107NP-182MC

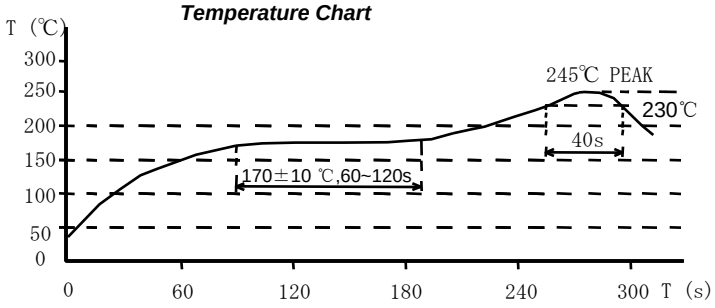


Solder Reflow Condition

Heat Endurance



Temperature Chart



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