

CDB78D68NP-R30MC Datasheet



DiGi Electronics Part Number	CDB78D68NP-R30MC-DG
Manufacturer	Sumida America Components Inc.
Manufacturer Product Number	CDB78D68NP-R30MC
Description	INDUCTOR
Detailed Description	300 nH Shielded Molded Inductor 60 A 0.28mOhm Nonstandard

<https://www.DiGi-Electronics.com>



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

CDB78D68NP-R30MC

Series:

CDB78D68

Type:

Molded

Inductance:

300 nH

Current Rating (Amps):

60 A

Shielding:

Shielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 MHz

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.283" (7.20mm)

Manufacturer:

Sumida America Components Inc.

Product Status:

Active

Material - Core:

Ferrite

Tolerance:

±20%

Current - Saturation (Isat):

22A

DC Resistance (DCR):

0.28mOhm

Frequency - Self Resonant:

-

Operating Temperature:

-40°C ~ 125°C

Features:

-

Package / Case:

Nonstandard

Size / Dimension:

0.409" L x 0.315" W (10.40mm x 8.00mm)

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

SMD Power Inductor

CDB78D68



Description

- Ferrite core construction.
- Magnetically shielded.
- LxWxH:10.4x8.0x7.0mm Max.
- Product weight: 2.6g(Ref.)
- Moisture Sensitivity Level: 1



Environmental Data

- Operating temperature range: -40°C~+125°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+105°C

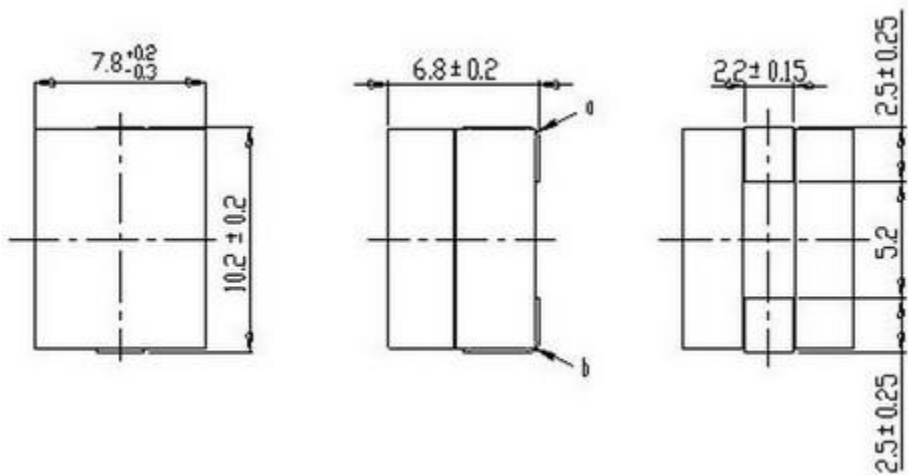
Packaging

- Carrier tape and reel packaging. 500pcs per reel.

Applications

- Multi-phase and Vcore regulators.
- Voltage Regulator Modules (VRMs). Such as Server and desktop, Central processing unit(CPU),Graphics processing unit (GPU), Application specific integrated circuit(ASIC), High power density.
- Data networking density.
- Graphics cards and battery power systems.

Dimension - [mm]

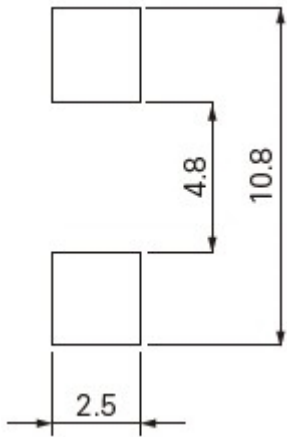


SMD Power Inductor

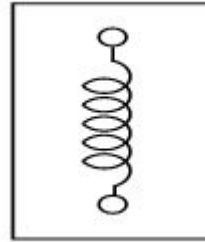
CDB78D68



Recommended Land pattern - [mm]



Wire Connection



SMD Power Inductor

CDB78D68



Electrical Characteristics

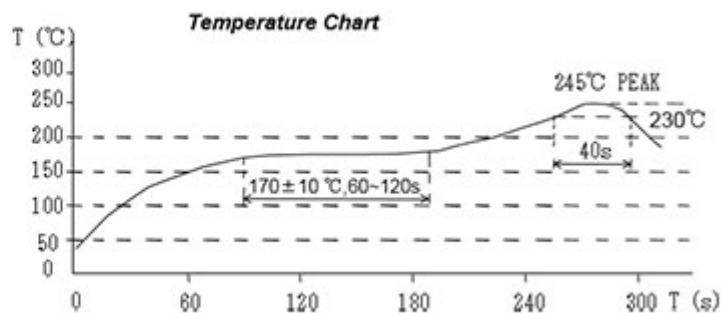
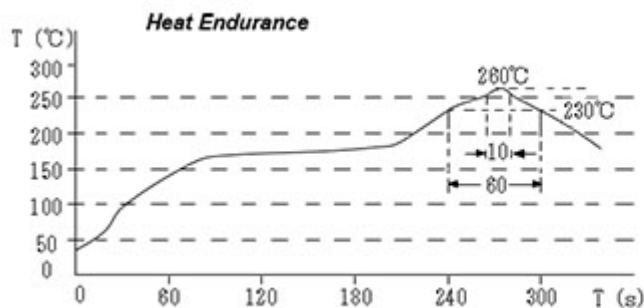
Part Number	Inductance [Within] (μ H) ※1	D.C.R. at 20°C Max.(Typ.) (m Ω)	Saturation Current (A) Max.(Typ.) ※2		Temperature Rise Current (A) Max.(Typ.) ※3
			20°C	125°C	
CDB78D68NP-R15MC	0.15 \pm 20%	0.28 \pm 10%	59.50 (70.00)	42.50 (50.00)	(60.00)
CDB78D68NP-R22MC	0.215 \pm 20%	0.28 \pm 10%	42.50 (50.00)	32.00 (38.00)	(60.00)
CDB78D68NP-R30MC	0.30 \pm 20%	0.28 \pm 10%	29.00 (34.00)	22.00 (26.00)	(60.00)
CDB78D68NP-R47MC	0.47 \pm 20%	0.28 \pm 10%	20.00 (23.50)	14.50 (17.00)	(60.00)

※1 Measuring frequency inductance at 1MHz.

※2 Saturation current: this indicates the actual value of D.C. current when the inductance becomes 20% lower than it's initial value..

※3 Temperature rise current: the actual value of D.C. current when temperature of coils becomes $\Delta T=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$).

Solder Reflow Condition



SMD Power Inductor

CDB78D68



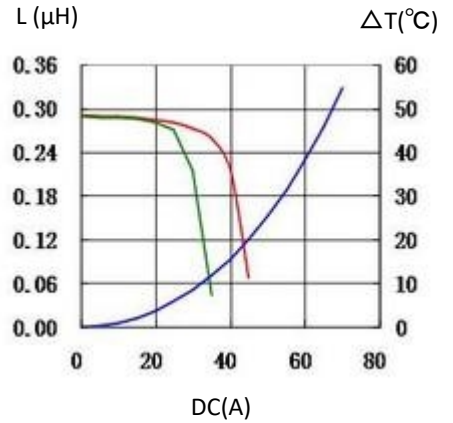
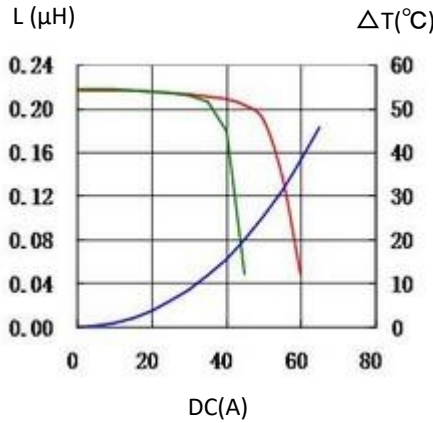
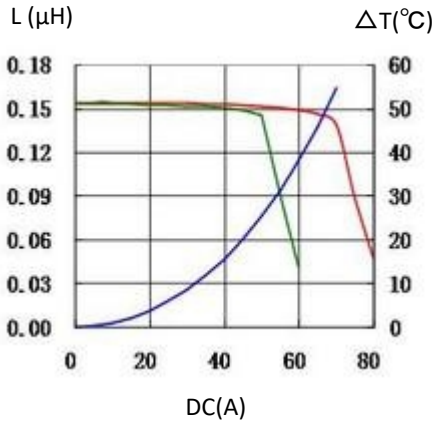
Saturation Current & Temperature Rise Graph

— L (20°C)
 — L (125°C)
 — ΔT

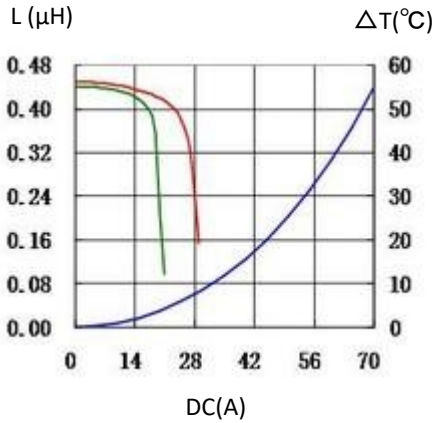
1. CDB78D68NP-R15MC

2. CDB78D68NP-R22MC

3. CDB78D68NP-R30MC



4. CDB78D68NP-R47MC



For sales office information, please [click here](#) to visit our website.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.