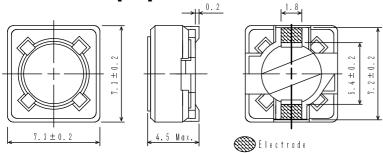
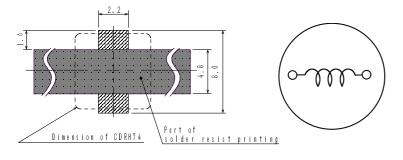




## Dimension - [mm]



## Land pattern and Schematics - [mm]



## **Description**

- Ferrite drum core construction.
- · Magnetically shielded.
- L  $\times$  W  $\times$  H: 7.5  $\times$  7.5  $\times$  4.5 mm Max.
- Product weight: 0.78g(Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

#### **Environmental Data**

- Operating temperature range: -40°C ~+100°C (including coil's self temperature rise)
- Storage temperature range: -40°C~+100°C
- Solder reflow temperature: 260 °C peak.

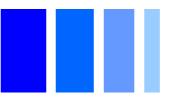
## **Packaging**

- · Carrier tape and reel packaging
- 12.9"diameter reel
- 1000pcs per reel

# **Applications**

 Ideally used in Notebook PC, LCD TV,DVD, Game machine, STB ,Projector etc as DC-DC converter inductors.

Page 1 of 5 Revised: 7-Jan-14





## **Electrical Characteristics**

Part Name	Stamp	Inductance (μ H) [within]※1	D.C.R.(Ω) Max. (Typ.) (at 20℃)	Rated Current (A) ※2
CDRH74NP-100MC-B	100	10 ± 20%	49m(38m)	1.84
CDRH74NP-120MC-B	120	12 ± 20%	58m(44m)	1.71
CDRH74NP-150MC-B	150	15 ± 20%	81m(62m)	1.47
CDRH74NP-180MC-B	180	18 ± 20%	91m(70m)	1.31
CDRH74NP-220MC-B	220	22 ± 20%	0.11(77m)	1.23
CDRH74NP-270MC-B	270	27 ± 20%	0.15(0.12)	1.12
CDRH74NP-330MC-B	330	33 ± 20%	0.17(0.13)	0.96
CDRH74NP-390MC-B	390	39 ± 20%	0.23(0.18)	0.91
CDRH74NP-470MC-B	470	47 ± 20%	0.26(0.20)	0.88
CDRH74NP-560MC-B	560	56 ± 20%	0.35(0.27)	0.75
CDRH74NP-680MC-B	680	68 ± 20%	0.38(0.30)	0.69
CDRH74NP-820MC-B	820	82 ± 20%	0.43(0.33)	0.61
CDRH74NP-101MC-B	101	100 ± 20%	0.61(0.47)	0.60
CDRH74NP-121MC-B	121	120 ± 20%	0.66(0.51)	0.52
CDRH74NP-151MC-B	151	150 ± 20%	0.88(0.68)	0.46
CDRH74NP-181MC-B	181	180 ± 20%	0.98(0.76)	0.42
CDRH74NP-221MC-B	221	220 ± 20%	1.17(0.90)	0.36
CDRH74NP-271MC-B	271	270 ± 20%	1.64(1.32)	0.34
CDRH74NP-331MC-B	331	330 ± 20%	1.86(1.49)	0.32
CDRH74NP-391MC-B	391	390 ± 20%	2.85(2.28)	0.29
CDRH74NP-471MC-B	471	470 ± 20%	3.01(2.41)	0.26
CDRH74NP-561MC-B	561	560 ± 20%	3.62(2.89)	0.23
CDRH74NP-681MC-B	681	680 ± 20%	4.63(3.71)	0.22
CDRH74NP-821MC-B	821	820 ± 20%	5.20(4.16)	0.20
CDRH74NP-102MC-B	102	1.0mH ± 20%	6.00(4.80)	0.18

<sup>※1.</sup> Inductance measuring condition: at 1 kHz.

Page 2 of 5 Revised: 7-Jan-14

 $<sup>\</sup>mbox{\%}2$ . Rated current: The DC current at which the inductance decreases to 75% of its nominal value or when  $\Delta t$ =40°C, whichever is lower (Ta=20°C ) .

DC (A)





DC (A)

Revised: 7-Jan-14

#### **Saturation Current & Temperature Rise Graph** - L (20°C) — L (100°C) L (μH) 1. CDRH74NP-100MC-B L ( $\mu$ H)2. CDRH74NP-120MC-B $\triangle T (\mathcal{C})$ $\triangle T$ (°C) $\triangle T (^{\circ}C)$ 1. 2 1. 8 **DC (A)** $\operatorname{DC}^2(A)$ DC (A) 3.2 L (μH)<sup>4.</sup> CDRH74NP-180MC-B $_{\rm L~(~\mu~H)}$ 5. CDRH74NP-220MC-B L ( $\mu$ H) 6. CDRH74NP-270MC-B $\triangle T$ (°C) △T (°C) $\triangle T$ (°C) 0.5 2.0 2.5 $0. \ 0 \ \ 0.5 \ \ 1. \ 0 \ \ 1.5 \ \ 2. \ 0 \ \ 2.5 \ \ 3. \ 0$ 0.5 1.0 2.0 2.5 0.0 1.0 1.5 0.0 1.5 DC (A) DC (A) DC (A) L ( $\mu$ H) 7. CDRH74NP-330MC-B L ( $\mu$ H) 8. CDRH74NP-390MC-B 9. CDRH74NP-470MC-B △T (°C) △T (°C) $\triangle T$ (°C) 0.0 0.4 0.8 1.2 1.6 2.0 2.4 $0. \ 0 \quad 0. \ 3 \quad 0. \ 6 \quad 0. \ 9 \quad 1. \ 2 \quad 1. \ 5$ $0. \ 0 \ \ 0.3 \ \ 0.6 \ \ 0.9 \ \ 1.2 \ \ 1.5 \ \ 1.8$ 1.8 DC (A) DC (A) DC (A) L (μH) 10. CDRH74NP-560MC-B $_{\rm L~(~\mu~H)}$ 11. CDRH74NP-680MC-B L ( $\mu$ H) 12. CDRH74NP-820MC-B $\triangle T$ (°C) $\triangle T$ (°C) $\triangle T (\mathcal{C})$ 0.3 0.6 0.9 0.3 0.9 0.9 0.0 1. 2 0.0 0.6 1.2 0.0 0.3 0.6 1.2 1.5 1.5 1.5

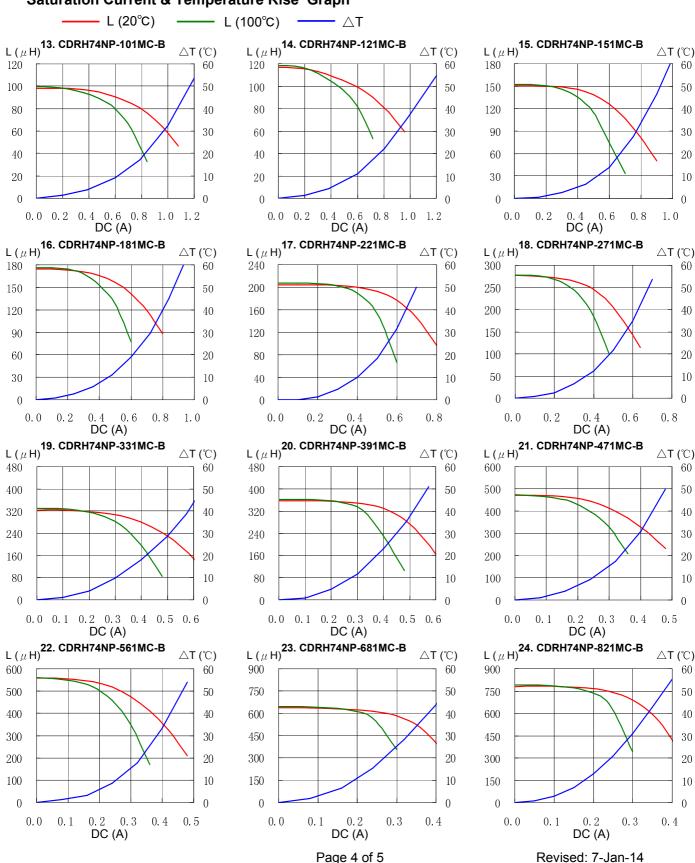
DC (A)

Page 3 of 5





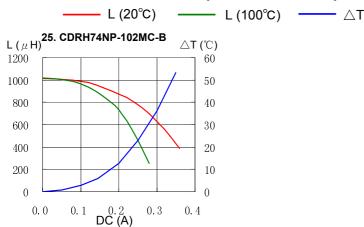
## **Saturation Current & Temperature Rise Graph**



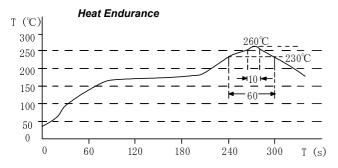


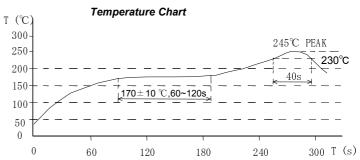


# **Saturation Current & Temperature Rise Graph**



#### **Solder Reflow Condition**





#### Please refer to the sales offices on our website - http://www.sumida.com

#### **Hong Kong** Tel.+852-2880-6781 FAX.+852-2565-9600 sales@hk.sumida.com Saitama(Japan)

Tel.+81-48-691-7300 FAX.+81-48-691-7340

sales@jp.sumida.com Chicago

Tel.+1-847-545-6700 FAX. +1-847-545-6720 sales@us.sumida.com

# Shanghai

Tel.+86-21-5836-3299 FAX.+86-21-5836-3266

shanghai.sales@cn.sumida.com

#### Seoul

Tel.+82-2-6237-0777 FAX.+82-2-6237-0778 sales@kr.sumida.com

# Obernzell

Tel.+49-8591-937-0 FAX. +49-8591-937-103 contact@eu.sumida.com

#### Shenzhen

Tel.+86-755-8291-0228 FAX.+86-755-8291-0338

shenzhen.sales@cn.sumida.com

# Singapore

Tel.+65-6296-3388 FAX.+65-6841-4426 sales@sg.sumida.com

#### Neumarkt

Tel.+49-9181-4509-110 FAX. +49-9181-4509-310 infocomp@eu.sumida.com

Page 5 of 5

# Taipei

Tel.+886-2-8751-2737 FAX.+886-2-8751-2738

sales@tw.sumida.com

#### San Jose

Tel.+1-408-321-9660 FAX.+1-408-321-9308

sales@us.sumida.com

Revised: 7-Jan-14

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# Sumida:

 CDRH74NP-220MC
 CDRH74NP-101MC
 CDRH74NP-820MC
 CDRH74NP-102MC
 CDRH74NP-100MC

 CDRH74NP-221MC
 CDRH74NP-821MC
 CDRH74NP-391MC
 CDRH74NP-121MC
 CDRH74NP-681MC
 CDRH74NP-561MC

 270MC
 CDRH74NP-150MC
 CDRH74NP-331MC
 CDRH74NP-561MC
 CDRH74NP-151MC
 CDRH74NP-560MC

 CDRH74NP-330MC
 CDRH74NP-271MC
 CDRH74NP-120MC
 CDRH74NP-390MC
 CDRH74NP-680MC
 CDRH74NP-470MC

 471MC
 CDRH74NP-180MC
 CDRH74NP-470MC
 CDRH74NP-470MC
 CDRH74NP-470MC