

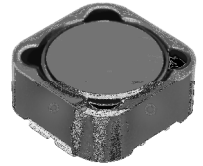


# THE DATASHEET OF CDRH125NP-220MC

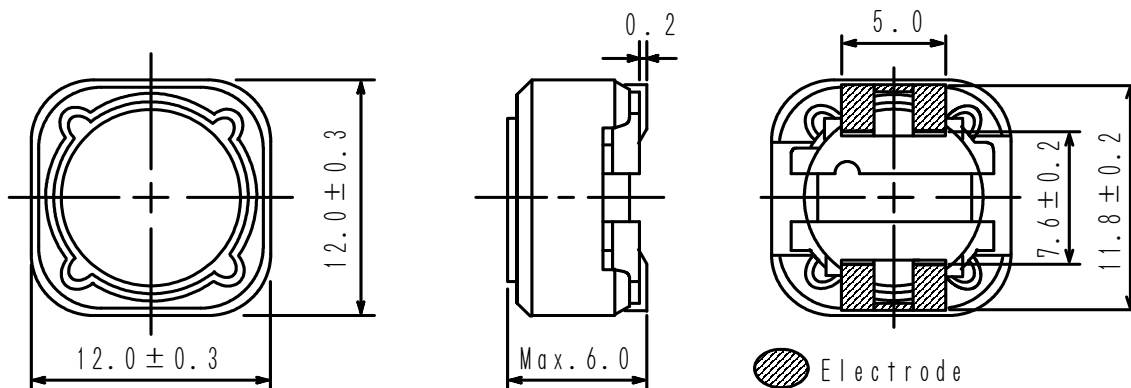
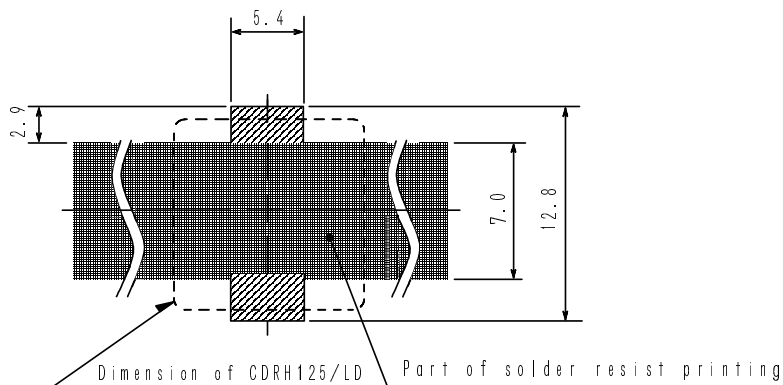


**Type: CDRH125, CDRH125/LD**
**◆ Product Description**

- 12.3×12.3mm Max.(L×W), 6.0mm Max. Height.
- Inductance Range: 1.3 μH~1.0mH(CDRH125); 7.5 μH~1.0mH(CDRH125/LD);
- Rated current range: 0.4~8.0A(CDRH125); 0.46~5.6A(CDRH125/LD);
- Custom design is available.


**◆ Feature**

- Magnetically shielded construction.
- Ideally used in Notebook PC, LCD TV,DVD, Game machine, STB ,Projector etc as DC-DC Converter inductors.
- RoHS Compliance.

**◆ Dimensions (mm)**

**◆ Land Pattern (mm)**


**Type: CDRH125, CDRH125/LD**
**◆ Specification (CDRH125)**

| Part Name<br>※  | Stamp | Inductance<br>( $\mu$ H)                         | D.C.R.( $\Omega$ )<br>Max.(Typ.)<br>(20°C) | Rated<br>Current<br>(A)※1 | Measuring<br>frequency |
|-----------------|-------|--|--|---------------------------|------------------------|
| CDRH125NP-1R3N□ | 1R3   | 1.3 $\begin{matrix} +30\% \\ -20\% \end{matrix}$ | 0.012(0.009)                               | 8.00                      | 7.96MHz                |
| CDRH125NP-2R1N□ | 2R1   | 2.1 $\begin{matrix} +30\% \\ -20\% \end{matrix}$ | 0.014(0.011)                               | 7.00                      | 7.96MHz                |
| CDRH125NP-3R1N□ | 3R1   | 3.1 $\begin{matrix} +30\% \\ -20\% \end{matrix}$ | 0.017(0.013)                               | 6.00                      | 7.96MHz                |
| CDRH125NP-4R4N□ | 4R4   | 4.4 $\begin{matrix} +30\% \\ -20\% \end{matrix}$ | 0.020(0.016)                               | 5.00                      | 7.96MHz                |
| CDRH125NP-5R8N□ | 5R8   | 5.8 $\begin{matrix} +30\% \\ -20\% \end{matrix}$ | 0.021(0.017)                               | 4.40                      | 7.96MHz                |
| CDRH125NP-7R5N□ | 7R5   | 7.5 $\begin{matrix} +30\% \\ -20\% \end{matrix}$ | 0.024(0.019)                               | 4.20                      | 7.96MHz                |
| CDRH125NP-100M□ | 100   | 10 $\pm$ 20%                                     | 0.025(0.019)                               | 4.00                      | 1KHz                   |
| CDRH125NP-120M□ | 120   | 12 $\pm$ 20%                                     | 0.027(0.021)                               | 3.50                      | 1KHz                   |
| CDRH125NP-150M□ | 150   | 15 $\pm$ 20%                                     | 0.030(0.023)                               | 3.30                      | 1KHz                   |
| CDRH125NP-180M□ | 180   | 18 $\pm$ 20%                                     | 0.034(0.026)                               | 3.00                      | 1KHz                   |
| CDRH125NP-220M□ | 220   | 22 $\pm$ 20%                                     | 0.036(0.028)                               | 2.80                      | 1KHz                   |
| CDRH125NP-270M□ | 270   | 27 $\pm$ 20%                                     | 0.051(0.039)                               | 2.30                      | 1KHz                   |
| CDRH125NP-330M□ | 330   | 33 $\pm$ 20%                                     | 0.057(0.044)                               | 2.10                      | 1KHz                   |
| CDRH125NP-390M□ | 390   | 39 $\pm$ 20%                                     | 0.068(0.052)                               | 2.00                      | 1KHz                   |
| CDRH125NP-470M□ | 470   | 47 $\pm$ 20%                                     | 0.075(0.058)                               | 1.80                      | 1KHz                   |
| CDRH125NP-560M□ | 560   | 56 $\pm$ 20%                                     | 0.11(0.084)                                | 1.70                      | 1KHz                   |
| CDRH125NP-680M□ | 680   | 68 $\pm$ 20%                                     | 0.12(0.093)                                | 1.50                      | 1KHz                   |
| CDRH125NP-820M□ | 820   | 82 $\pm$ 20%                                     | 0.14(0.11)                                 | 1.40                      | 1KHz                   |
| CDRH125NP-101M□ | 101   | 100 $\pm$ 20%                                    | 0.16(0.12)                                 | 1.30                      | 1KHz                   |
| CDRH125NP-121M□ | 121   | 120 $\pm$ 20%                                    | 0.17(0.13)                                 | 1.10                      | 1KHz                   |
| CDRH125NP-151M□ | 151   | 150 $\pm$ 20%                                    | 0.23(0.18)                                 | 1.00                      | 1KHz                   |
| CDRH125NP-181M□ | 181   | 180 $\pm$ 20%                                    | 0.29(0.22)                                 | 0.90                      | 1KHz                   |
| CDRH125NP-221M□ | 221   | 220 $\pm$ 20%                                    | 0.40(0.31)                                 | 0.80                      | 1KHz                   |
| CDRH125NP-271M□ | 271   | 270 $\pm$ 20%                                    | 0.46(0.35)                                 | 0.75                      | 1KHz                   |

**Type: CDRH125, CDRH125/LD**

| Part Name<br>※  | Stamp | Inductance<br>( $\mu$ H) | D.C.R.( $\Omega$ )<br>Max.(Typ.)<br>(at 20°C) | Rated Current<br>(A)※1 | Measuring<br>frequency |
|-----------------|-------|--------------------------|---|------------------------|------------------------|
| CDRH125NP-331M□ | 331   | 330 $\pm$ 20%            | 0.51(0.39)                                    | 0.68                   | 1KHz                   |
| CDRH125NP-391M□ | 391   | 390 $\pm$ 20%            | 0.69(0.53)                                    | 0.65                   | 1KHz                   |
| CDRH125NP-471M□ | 471   | 470 $\pm$ 20%            | 0.77(0.59)                                    | 0.58                   | 1KHz                   |
| CDRH125NP-561M□ | 561   | 560 $\pm$ 20%            | 0.86(0.66)                                    | 0.54                   | 1KHz                   |
| CDRH125NP-681M□ | 681   | 680 $\pm$ 20%            | 1.20(0.92)                                    | 0.48                   | 1KHz                   |
| CDRH125NP-821M□ | 821   | 820 $\pm$ 20%            | 1.34(1.03)                                    | 0.43                   | 1KHz                   |
| CDRH125NP-102M□ | 102   | 1000 $\pm$ 20%           | 1.53(1.18)                                    | 0.40                   | 1KHz                   |

**◆ Specification (CDRH125/LD)**

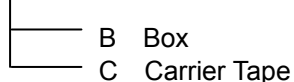
| Part No.<br>※      | Stamp | Inductance<br>( $\mu$ H)※1 | D.C.R.<br>( $\Omega$ )<br>[Typ.] | D.C.R.<br>( $\Omega$ )<br>[Max.] | Rated current<br>(A)※1 | Measuring<br>frequency |
|--------------------|-------|----------------------------|----------------------------------|----------------------------------|------------------------|------------------------|
| CDRH125/LDNP-7R5N□ | 7R5   | 7.5 $\pm$ 30%              | 14.7m $\Omega$                   | 19.0m $\Omega$                   | 5.60                   | 7.96MHz                |
| CDRH125/LDNP-100N□ | 100   | 10 $\pm$ 30%               | 22.5m $\Omega$                   | 29.0m $\Omega$                   | 4.60                   | 100KHz                 |
| CDRH125/LDNP-120M□ | 120   | 12 $\pm$ 20%               | 24.6m $\Omega$                   | 32.0m $\Omega$                   | 4.20                   | 100KHz                 |
| CDRH125/LDNP-150M□ | 150   | 15 $\pm$ 20%               | 27.1m $\Omega$                   | 35.0m $\Omega$                   | 4.00                   | 100KHz                 |
| CDRH125/LDNP-180M□ | 180   | 18 $\pm$ 20%               | 31.8m $\Omega$                   | 41.0m $\Omega$                   | 3.56                   | 100KHz                 |
| CDRH125/LDNP-220M□ | 220   | 22 $\pm$ 20%               | 33.9m $\Omega$                   | 44.0m $\Omega$                   | 3.28                   | 100KHz                 |
| CDRH125/LDNP-270M□ | 270   | 27 $\pm$ 20%               | 41.5m $\Omega$                   | 52.0m $\Omega$                   | 3.00                   | 100KHz                 |
| CDRH125/LDNP-330M□ | 330   | 33 $\pm$ 20%               | 50.0m $\Omega$                   | 65.0m $\Omega$                   | 2.60                   | 100KHz                 |
| CDRH125/LDNP-390M□ | 390   | 39 $\pm$ 20%               | 60.0m $\Omega$                   | 75.0m $\Omega$                   | 2.40                   | 100KHz                 |
| CDRH125/LDNP-470M□ | 470   | 47 $\pm$ 20%               | 72.5m $\Omega$                   | 95.0m $\Omega$                   | 2.30                   | 100KHz                 |
| CDRH125/LDNP-560M□ | 560   | 56 $\pm$ 20%               | 95.4m $\Omega$                   | 125m $\Omega$                    | 2.00                   | 100KHz                 |
| CDRH125/LDNP-680M□ | 680   | 68 $\pm$ 20%               | 0.110                            | 0.140                            | 1.85                   | 100KHz                 |
| CDRH125/LDNP-820M□ | 820   | 82 $\pm$ 20%               | 0.121                            | 0.157                            | 1.70                   | 100KHz                 |
| CDRH125/LDNP-101M□ | 101   | 100 $\pm$ 20%              | 0.144                            | 0.187                            | 1.60                   | 100KHz                 |
| CDRH125/LDNP-121M□ | 121   | 120 $\pm$ 20%              | 0.175                            | 0.228                            | 1.37                   | 100KHz                 |
| CDRH125/LDNP-151M□ | 151   | 150 $\pm$ 20%              | 0.218                            | 0.280                            | 1.26                   | 100KHz                 |

**Type: CDRH125, CDRH125/LD**

| Part No.<br>※      | Stamp | Inductance<br>( $\mu$ H) | D.C.R<br>( $\Omega$ )<br>[Typ.] | D.C.R<br>( $\Omega$ )<br>[Max.] | Rated<br>current<br>(A)※1 | Measuring<br>frequency |
|--------------------|-------|--------------------------|---------------------------------|---------------------------------|---------------------------|------------------------|
| CDRH125/LDNP-181M□ | 181   | 180 $\pm$ 20%            | 0.259                           | 0.335                           | 1.14                      | 100KHz                 |
| CDRH125/LDNP-221M□ | 221   | 220 $\pm$ 20%            | 0.303                           | 0.395                           | 1.08                      | 100KHz                 |
| CDRH125/LDNP-271M□ | 271   | 270 $\pm$ 20%            | 0.403                           | 0.520                           | 0.94                      | 100KHz                 |
| CDRH125/LDNP-331M□ | 331   | 330 $\pm$ 20%            | 0.547                           | 0.710                           | 0.85                      | 100KHz                 |
| CDRH125/LDNP-391M□ | 391   | 390 $\pm$ 20%            | 0.614                           | 0.800                           | 0.77                      | 100KHz                 |
| CDRH125/LDNP-471M□ | 471   | 470 $\pm$ 20%            | 0.711                           | 0.920                           | 0.72                      | 100KHz                 |
| CDRH125/LDNP-561M□ | 561   | 560 $\pm$ 20%            | 0.956                           | 1.20                            | 0.67                      | 100KHz                 |
| CDRH125/LDNP-681M□ | 681   | 680 $\pm$ 20%            | 1.08                            | 1.35                            | 0.57                      | 100KHz                 |
| CDRH125/LDNP-821M□ | 821   | 820 $\pm$ 20%            | 1.17                            | 1.40                            | 0.51                      | 100KHz                 |
| CDRH125/LDNP-102M□ | 102   | 1000 $\pm$ 20%           | 1.62                            | 1.95                            | 0.46                      | 100KHz                 |

**※ Description of part name**

CDRH125NP-100M□



※1. Rated current: The DC current at which the inductance decreases to 75% of its nominal value or when  $\Delta t=40^{\circ}\text{C}$ , whichever is lower( $T_a=20^{\circ}\text{C}$ ).

## Looking for pricing, stock, or lifecycle information?

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