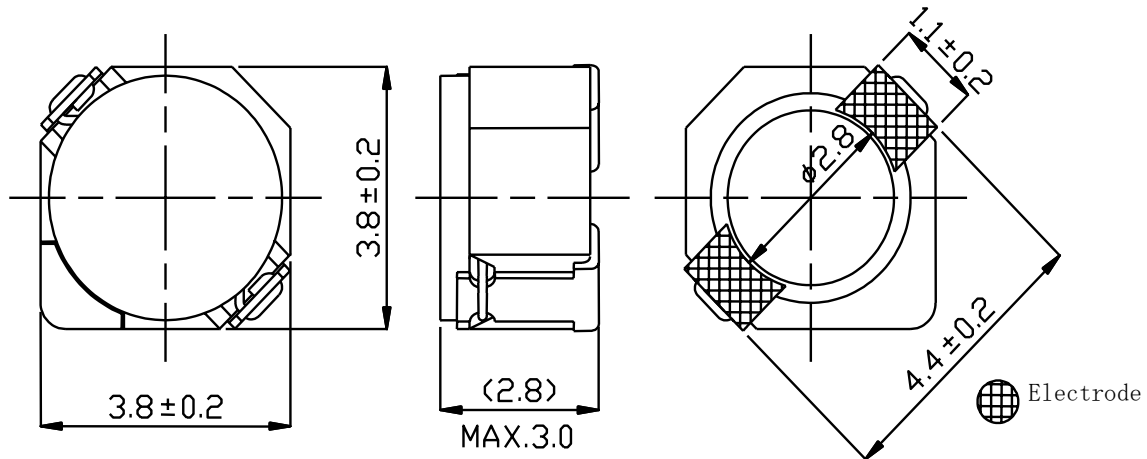
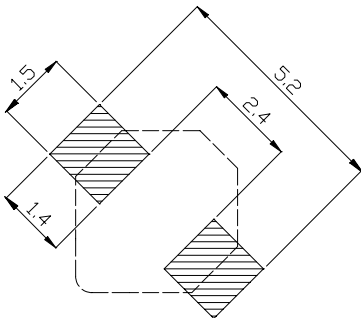


**Type: CDRH3D28, CDRH3D28/LD**
**◆ Product Description**

- 4.0×4.0mm Max. (L×W), 3.0mm Max.height.
- Inductance Range:3.3~47  $\mu$  H (CDRH3D28), 10~220  $\mu$  H (CDRH3D28/LD).
- Rated Current Range 0.48~2.0A(CDRH3D28), 0.116~0.50A(CDRH3D28/LD).


**◆ Feature**

- Magnetically shielded construction.
- Ideally used in Mobilephone,PDA,MP3,DSC/DVC,Portable DVD,etc as DC-DC Converter inductors.
- RoHS Compliance.

**◆ Dimensions (mm)**

**◆ Land Pattern (mm)**


**Type: CDRH3D28, CDRH3D28/LD**
**◆ Specification(CDRH3D28)**

| Part Name<br>※               | Stamp | Inductance<br>( $\mu$ H)<br>[Within]<br>100kHz/1V | D.C.R.(m $\Omega$ )<br>Max.(Typ.)<br>(at 20°C) | Saturation Current<br>(A) ※1 |           | Temperature<br>rise current<br>(A) ※2 |
|------------------------------|-------|---|--|------------------------------|-----------|---------------------------------------|
|                              |       |   |  | (at 20°C)                    | (at100°C) |                                       |
| CDRH3D28NP-3R3N□             | A     | 3.3 $\pm$ 30%                                     | 72.1(57.7)                                     | 2.00                         | 1.48      | 1.85                                  |
| CDRH3D28NP-4R7N□             | B     | 4.7 $\pm$ 30%                                     | 88.3(70.6)                                     | 1.65                         | 1.28      | 1.62                                  |
| CDRH3D28NP-6R8N□             | C     | 6.8 $\pm$ 30%                                     | 119(95.0)                                      | 1.24                         | 0.94      | 1.32                                  |
| CDRH3D28NP-1 $\emptyset$ 0N□ | D     | 10 $\pm$ 30%                                      | 145(116)                                       | 1.05                         | 0.80      | 1.18                                  |
| CDRH3D28NP-15 $\emptyset$ N□ | E     | 15 $\pm$ 30%                                      | 213(170)                                       | 0.90                         | 0.64      | 1.02                                  |
| CDRH3D28NP-22 $\emptyset$ N□ | F     | 22 $\pm$ 30%                                      | 335(268)                                       | 0.76                         | 0.55      | 0.74                                  |
| CDRH3D28NP-33 $\emptyset$ N□ | G     | 33 $\pm$ 30%                                      | 481(385)                                       | 0.58                         | 0.44      | 0.63                                  |
| CDRH3D28NP-47 $\emptyset$ N□ | H     | 47 $\pm$ 30%                                      | 599(479)                                       | 0.48                         | 0.36      | 0.56                                  |

**◆ Specification(CDRH3D28/LD)**

| Part Name<br>※                  | Stamp | Inductance<br>( $\mu$ H)<br>[Within]<br>100kHz/1V | D.C.R.(m $\Omega$ )<br>Max.(Typ.)<br>(at 20°C) | Saturation Current<br>(A) ※1 |           | Temperature<br>Rise current<br>(A) ※2 |
|---------------------------------|-------|---|--|------------------------------|-----------|---------------------------------------|
|                                 |       |   |  | (at20°C)                     | (at105°C) |                                       |
| CDRH3D28/LDNP-1 $\emptyset$ 0N□ | A     | 10 $\pm$ 30%                                      | 95(73)   | 0.50                         | 0.43      | 1.52                                  |
| CDRH3D28/LDNP-12 $\emptyset$ N□ | B     | 12 $\pm$ 30%                                      | 100(80)  | 0.45                         | 0.38      | 1.48                                  |
| CDRH3D28/LDNP-15 $\emptyset$ N□ | C     | 15 $\pm$ 30%                                      | 115(90)  | 0.40                         | 0.33      | 1.44                                  |
| CDRH3D28/LDNP-18 $\emptyset$ N□ | D     | 18 $\pm$ 30%                                      | 125(100)                                       | 0.35                         | 0.30      | 1.37                                  |
| CDRH3D28/LDNP-22 $\emptyset$ N□ | E     | 22 $\pm$ 30%                                      | 145(117)                                       | 0.33                         | 0.28      | 1.28                                  |
| CDRH3D28/LDNP-27 $\emptyset$ N□ | F     | 27 $\pm$ 30%                                      | 175(140)                                       | 0.29                         | 0.26      | 1.18                                  |
| CDRH3D28/LDNP-33 $\emptyset$ N□ | G     | 33 $\pm$ 30%                                      | 215(170)                                       | 0.28                         | 0.23      | 1.15                                  |
| CDRH3D28/LDNP-39 $\emptyset$ N□ | H     | 39 $\pm$ 30%                                      | 225(180)                                       | 0.25                         | 0.21      | 1.00                                  |
| CDRH3D28/LDNP-47 $\emptyset$ N□ | J     | 47 $\pm$ 30%                                      | 305(245)                                       | 0.23                         | 0.19      | 0.81                                  |
| CDRH3D28/LDNP-56 $\emptyset$ N□ | K     | 56 $\pm$ 30%                                      | 325(260)                                       | 0.20                         | 0.17      | 0.76                                  |
| CDRH3D28/LDNP-68 $\emptyset$ N□ | L     | 68 $\pm$ 30%                                      | 470(375)                                       | 0.185                        | 0.156     | 0.60                                  |
| CDRH3D28/LDNP-82 $\emptyset$ N□ | M     | 82 $\pm$ 30%                                      | 540(430)                                       | 0.172                        | 0.142     | 0.58                                  |
| CDRH3D28/LDNP-1 $\emptyset$ 1N□ | N     | 100 $\pm$ 30%                                     | 610(485)                                       | 0.160                        | 0.128     | 0.52                                  |
| CDRH3D28/LDNP-121N□             | P     | 120 $\pm$ 30%                                     | 755(605)                                       | 0.136                        | 0.116     | 0.50                                  |
| CDRH3D28/LDNP-151N□             | Q     | 150 $\pm$ 30%                                     | 880(705)                                       | 0.124                        | 0.106     | 0.48                                  |
| CDRH3D28/LDNP-181N□             | R     | 180 $\pm$ 30%                                     | 1130(905)                                      | 0.119                        | 0.095     | 0.42                                  |
| CDRH3D28/LDNP-221N□             | S     | 220 $\pm$ 30%                                     | 1270(1015)                                     | 0.116                        | 0.087     | 0.36                                  |

**※ Description of Part Name**

 CDRH3D28/LDNP-1 $\emptyset$ 0N□

— B Box

— C Carrier Tape

※1.Saturation Current: The DC current at which the inductance decreases to 65% of its nominal value

 ※2 Temperature rise current:The DC current at which the temperature rise is  $\Delta t=40^{\circ}\text{C}$ .( $T_a=20^{\circ}\text{C}$ )

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