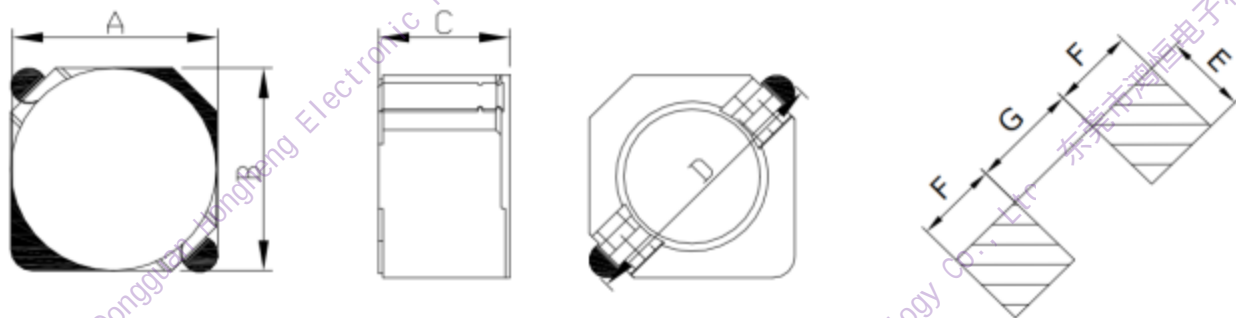


**Features:**

- A wide range of product line up is available to meet the various requirements.
- For DC/DC converter applications.
- Ideally used in thin-screen TV, LCDs, AV equipment and other electronic devices.
- Custom design is also available.
- RoHS compliant.

**Appearance dimensions** (mm, dimensions without tolerance are typical):

Recommended Land Patterns



| Type       | A        | B        | C         | D        | E   | F   | G   | MPQ(pcs) |
|------------|----------|----------|-----------|----------|-----|-----|-----|----------|
| CDRH2D11A  | 3.2 Max. | 3.2 Max. | 1.25 Max. | 4.5 Max. | 1.3 | 1.3 | 1.7 | 1500     |
| CDRH2D14A  | 3.2 Max. | 3.2 Max. | 1.55 Max. | 4.5 Max. | 1.3 | 1.3 | 1.7 | 3000     |
| CDRH2D18A  | 3.2 Max. | 3.2 Max. | 2.1 Max.  | 4.5 Max. | 1.3 | 1.3 | 1.7 | 3000     |
| CDRH3D18AP | 3.2 Max. | 3.2 Max. | 2.1 Max.  | 4.5 Max. | 1.3 | 1.3 | 1.7 | 3000     |
| CDRH3D11A  | 4.0 Max. | 4.0 Max. | 1.3 Max.  | 5.5 Max. | 1.5 | 1.4 | 2.4 | 3000     |
| CDRH3D14A  | 4.0 Max. | 4.0 Max. | 1.6 Max.  | 5.5 Max. | 1.5 | 1.4 | 2.4 | 1000     |
| CDRH3D16A  | 4.0 Max. | 4.0 Max. | 1.8 Max.  | 5.5 Max. | 1.5 | 1.4 | 2.4 | 3000     |
| CDRH6D28A  | 7.0 Max. | 7.0 Max. | 3.2 Max.  | 9.5 Max. | 1.5 | 1.7 | 5.5 | 1500     |

**CDRH2D11A Electrical Characteristics**

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH2D11A-1R5N | 1.50            | 30%           | 66.0         | 0.900        | 1.125        | 1.300        | 1.600        |
| CDRH2D11A-2R2N | 2.20            | 30%           | 98.0         | 0.750        | 0.938        | 1.100        | 1.400        |
| CDRH2D11A-3R3N | 3.30            | 30%           | 125          | 0.600        | 0.750        | 0.900        | 1.100        |
| CDRH2D11A-4R7N | 4.70            | 30%           | 170          | 0.500        | 0.625        | 0.700        | 0.900        |
| CDRH2D11A-6R8N | 6.80            | 30%           | 260          | 0.450        | 0.563        | 0.600        | 0.800        |
| CDRH2D11A-100M | 10.0            | 20%           | 400          | 0.350        | 0.438        | 0.500        | 0.600        |
| CDRH2D11A-150M | 15.0            | 20%           | 500          | 0.300        | 0.375        | 0.400        | 0.500        |
| CDRH2D11A-220M | 22.0            | 20%           | 780          | 0.250        | 0.313        | 0.400        | 0.500        |
| CDRH2D11A-330M | 33.0            | 20%           | 1225         | 0.200        | 0.250        | 0.300        | 0.400        |

## CDRH2D14A Electrical Characteristics

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH2D14A-1R0N | 1.00            | 30%           | 50.0         | 1.950        | 2.438        | 2.800        | 3.500        |
| CDRH2D14A-1R5N | 1.50            | 30%           | 65.0         | 1.810        | 2.263        | 2.600        | 3.300        |
| CDRH2D14A-1R8N | 1.80            | 30%           | 75.0         | 1.650        | 2.063        | 2.400        | 3.000        |
| CDRH2D14A-2R2N | 2.20            | 30%           | 95.0         | 1.500        | 1.875        | 2.200        | 2.800        |
| CDRH2D14A-2R7N | 2.70            | 30%           | 106          | 1.350        | 1.688        | 1.900        | 2.400        |
| CDRH2D14A-3R3N | 3.30            | 30%           | 125          | 1.200        | 1.500        | 1.700        | 2.100        |
| CDRH2D14A-3R9N | 3.90            | 30%           | 138          | 1.100        | 1.375        | 1.600        | 2.000        |
| CDRH2D14A-4R7N | 4.70            | 30%           | 169          | 1.020        | 1.275        | 1.500        | 1.900        |
| CDRH2D14A-5R6N | 5.60            | 30%           | 188          | 0.950        | 1.188        | 1.400        | 1.800        |
| CDRH2D14A-6R8N | 6.80            | 30%           | 213          | 0.850        | 1.063        | 1.200        | 1.500        |
| CDRH2D14A-8R2N | 8.20            | 30%           | 280          | 0.800        | 1.000        | 1.200        | 1.500        |
| CDRH2D14A-100N | 10.0            | 30%           | 295          | 0.700        | 0.875        | 1.000        | 1.300        |
| CDRH2D14A-120N | 12.0            | 30%           | 394          | 0.620        | 0.775        | 0.900        | 1.100        |
| CDRH2D14A-150N | 15.0            | 30%           | 596          | 0.550        | 0.688        | 0.800        | 1.000        |
| CDRH2D14A-220N | 22.0            | 30%           | 670          | 0.500        | 0.625        | 0.700        | 0.900        |

## CDRH2D18A Electrical Characteristics

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH2D18A-2R2N | 2.20            | 30%           | 46.0         | 0.850        | 1.063        | 1.200        | 1.500        |
| CDRH2D18A-3R3N | 3.30            | 30%           | 69.0         | 0.750        | 0.938        | 1.100        | 1.400        |
| CDRH2D18A-4R7N | 4.70            | 30%           | 88.0         | 0.650        | 0.813        | 0.900        | 1.100        |
| CDRH2D18A-6R8N | 6.80            | 30%           | 106          | 0.520        | 0.650        | 0.700        | 0.900        |
| CDRH2D18A-100M | 10.0            | 20%           | 180          | 0.430        | 0.538        | 0.600        | 0.800        |
| CDRH2D18A-150M | 15.0            | 20%           | 240          | 0.350        | 0.438        | 0.500        | 0.600        |
| CDRH2D18A-220M | 22.0            | 20%           | 350          | 0.300        | 0.375        | 0.400        | 0.500        |
| CDRH2D18A-330M | 33.0            | 20%           | 460          | 0.250        | 0.313        | 0.400        | 0.500        |
| CDRH2D18A-470M | 47.0            | 20%           | 750          | 0.200        | 0.250        | 0.300        | 0.400        |

## CDRH2D18AP Electrical Characteristics

| Part No.         | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|------------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH2D18AHP-1R1N | 1.10            | 30%           | 45.0         | 2.530        | 3.163        | 3.600        | 4.500        |
| CDRH2D18AHP-1R7N | 1.70            | 30%           | 55.0         | 1.850        | 2.313        | 2.700        | 3.400        |
| CDRH2D18AHP-2R2N | 2.20            | 30%           | 60.0         | 1.600        | 2.000        | 2.300        | 2.900        |
| CDRH2D18AHP-3R3N | 3.30            | 30%           | 86.0         | 1.450        | 1.813        | 2.100        | 2.600        |
| CDRH2D18AHP-4R7N | 4.70            | 30%           | 140          | 1.200        | 1.500        | 1.700        | 2.100        |
| CDRH2D18AHP-6R3N | 6.30            | 30%           | 160          | 1.050        | 1.313        | 1.500        | 1.900        |
| CDRH2D18AHP-100M | 10.0            | 20%           | 245          | 0.850        | 1.063        | 1.200        | 1.500        |
| CDRH2D18AHP-150M | 15.0            | 20%           | 385          | 0.700        | 0.875        | 1.000        | 1.300        |

## CDRH3D11 Electrical Characteristics

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH3D11A-2R7N | 2.70            | 30%           | 78.0         | 0.550        | 0.688        | 0.800        | 1.000        |
| CDRH3D11A-4R7N | 4.70            | 30%           | 125          | 0.400        | 0.500        | 0.600        | 0.800        |
| CDRH3D11A-6R8N | 6.80            | 30%           | 180          | 0.350        | 0.438        | 0.500        | 0.600        |
| CDRH3D11A-8R2N | 8.20            | 30%           | 230          | 0.320        | 0.400        | 0.500        | 0.600        |
| CDRH3D11A-100N | 10.0            | 30%           | 240          | 0.280        | 0.350        | 0.400        | 0.500        |
| CDRH3D11A-120N | 12.0            | 30%           | 276          | 0.250        | 0.313        | 0.400        | 0.500        |
| CDRH3D11A-150N | 15.0            | 30%           | 370          | 0.230        | 0.288        | 0.300        | 0.400        |
| CDRH3D11A-180N | 18.0            | 30%           | 468          | 0.210        | 0.263        | 0.300        | 0.400        |
| CDRH3D11A-220N | 22.0            | 30%           | 540          | 0.190        | 0.238        | 0.300        | 0.400        |
| CDRH3D11A-270N | 27.0            | 30%           | 726          | 0.170        | 0.213        | 0.200        | 0.300        |

## CDRH3D11 Electrical Characteristics

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH3D11A-330N | 33.0            | 30%           | 822          | 0.150        | 0.188        | 0.200        | 0.300        |
| CDRH3D11A-390N | 39.0            | 30%           | 940          | 0.140        | 0.175        | 0.200        | 0.300        |

## CDRH3D14A Electrical Characteristics

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH3D14A-1R2N | 1.20            | 30%           | 45.0         | 2.150        | 2.688        | 3.100        | 3.900        |
| CDRH3D14A-1R7N | 1.70            | 30%           | 65.0         | 1.850        | 2.313        | 2.700        | 3.400        |
| CDRH3D14A-2R2N | 2.20            | 30%           | 69.0         | 1.600        | 2.000        | 2.300        | 2.900        |
| CDRH3D14A-2R7N | 2.70            | 30%           | 88.0         | 1.450        | 1.813        | 2.100        | 2.600        |
| CDRH3D14A-3R3N | 3.30            | 30%           | 100          | 1.350        | 1.688        | 1.900        | 2.400        |
| CDRH3D14A-3R9N | 3.90            | 30%           | 135          | 1.150        | 1.438        | 1.700        | 2.100        |
| CDRH3D14A-4R7N | 4.70            | 30%           | 150          | 1.100        | 1.375        | 1.600        | 2.000        |
| CDRH3D14A-8R2N | 8.20            | 30%           | 238          | 0.800        | 1.000        | 1.200        | 1.500        |
| CDRH3D14A-100N | 10.0            | 30%           | 260          | 0.750        | 0.938        | 1.100        | 1.400        |
| CDRH3D14A-120N | 12.0            | 30%           | 350          | 0.670        | 0.838        | 1.000        | 1.300        |
| CDRH3D14A-150N | 15.0            | 30%           | 488          | 0.600        | 0.750        | 0.900        | 1.100        |
| CDRH3D14A-220N | 22.0            | 30%           | 575          | 0.520        | 0.650        | 0.700        | 0.900        |

## CDRH3D16A Electrical Characteristics

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH3D16A-1R1N | 1.10            | 30%           | 50.0         | 1.900        | 2.375        | 2.700        | 3.400        |
| CDRH3D16A-1R5N | 1.50            | 30%           | 53.0         | 1.550        | 1.938        | 2.200        | 2.800        |
| CDRH3D16A-2R2N | 2.20            | 30%           | 72.0         | 1.200        | 1.500        | 1.700        | 2.100        |
| CDRH3D16A-3R3N | 3.30            | 30%           | 85.0         | 1.100        | 1.375        | 1.600        | 2.000        |
| CDRH3D16A-4R7N | 4.70            | 30%           | 105          | 0.900        | 1.125        | 1.300        | 1.600        |
| CDRH3D16A-6R8N | 6.80            | 30%           | 170          | 0.750        | 0.938        | 1.100        | 1.400        |
| CDRH3D16A-100N | 10.0            | 30%           | 210          | 0.550        | 0.688        | 0.800        | 1.000        |
| CDRH3D16A-150N | 15.0            | 30%           | 295          | 0.450        | 0.563        | 0.600        | 0.800        |
| CDRH3D16A-220N | 22.0            | 30%           | 430          | 0.400        | 0.500        | 0.600        | 0.800        |
| CDRH3D16A-330N | 33.0            | 30%           | 675          | 0.330        | 0.413        | 0.500        | 0.600        |
| CDRH3D16A-151N | 150.0           | 30%           | 3210         | 0.180        | 0.225        | 0.300        | 0.400        |
| CDRH3D16A-221N | 220.0           | 30%           | 5200         | 0.160        | 0.200        | 0.200        | 0.300        |
| CDRH3D16A-331N | 330.0           | 30%           | 6800         | 0.140        | 0.175        | 0.200        | 0.300        |

## CDRH6D28A Electrical Characteristics

| Part No.       | Inductance (uH) | Tolerance (%) | DCR (mΩ)Max. | Isat (A)Max. | Isat (A)Typ. | Irms (A)Max. | Irms (A)Typ. |
|----------------|-----------------|---------------|--------------|--------------|--------------|--------------|--------------|
| CDRH6D28A-680M | 68.00           | 20%           | 385          | 1.000        | 1.250        | 1.400        | 1.800        |
| CDRH6D28A-101M | 100.0           | 20%           | 565          | 0.800        | 1.000        | 1.200        | 1.500        |
| CDRH6D28A-151M | 150.0           | 20%           | 895          | 0.650        | 0.813        | 0.900        | 1.100        |
| CDRH6D28A-221M | 220.0           | 20%           | 1460         | 0.550        | 0.688        | 0.800        | 1.000        |
| CDRH6D28A-331M | 330.0           | 20%           | 2130         | 0.400        | 0.500        | 0.600        | 0.800        |
| CDRH6D28A-471M | 470.0           | 20%           | 3520         | 0.300        | 0.375        | 0.400        | 0.500        |
| CDRH6D28A-561M | 560.0           | 20%           | 4900         | 0.260        | 0.325        | 0.400        | 0.500        |
| CDRH6D28A-681M | 680.0           | 20%           | 5400         | 0.220        | 0.275        | 0.300        | 0.400        |

### Remarks:

- \* All test data is referenced to 25°C ambient temperature .
- \* Test equipment: VC4092B, TH2516B, HP4284/HP4284A ,HP4285 or equivalent .
- \* Inductance: at 100kHz/1.0Vrms.
- \* Isat: DC current at which the inductance drops 30% from its initial value without current.
- \* I rms: DC current that causes the temperature rise ( $\Delta T=40^{\circ}\text{C}$ ) from 25°C.