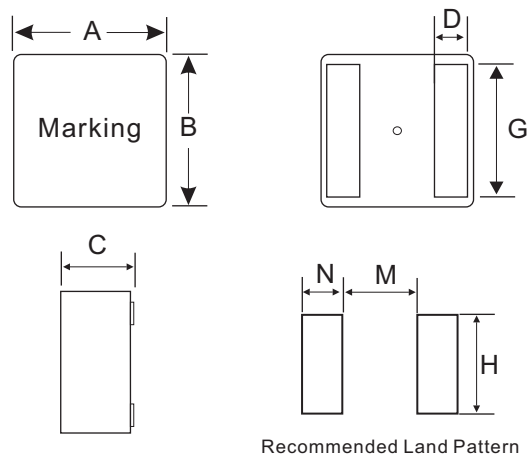
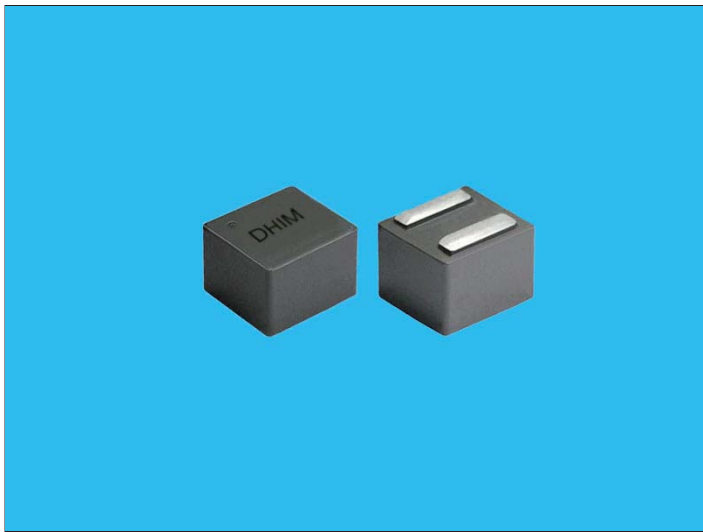


# SMD High Current Inductors



## Dimensions and Footprint (Unit:mm)

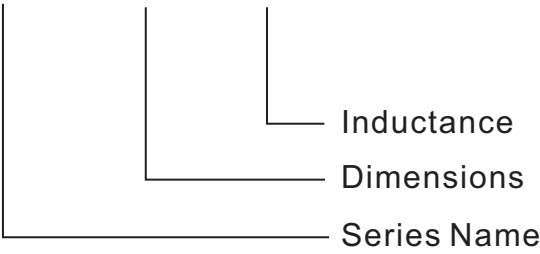
| Type                | A       | B       | C       | D        | G       | N(Ref.) | M(Ref.) | H(Ref.) |
|---------------------|---------|---------|---------|----------|---------|---------|---------|---------|
| DHIM0420            | 4.1±0.2 | 4.1±0.3 | 1.9±0.2 | 0.88±0.2 | 3.4±0.3 | 1       | 1.4     | 3.8     |
| DHIM0520            | 5.5±0.2 | 5.5±0.2 | 1.9±0.2 | 1.1±0.3  | 4.3±0.3 | 1.25    | 2       | 4.7     |
| DHIM0530            | 5.5±0.2 | 5.5±0.2 | 2.9±0.2 | 1.1±0.3  | 4.3±0.3 | 1.25    | 2       | 4.7     |
| DHIM0630<br>L≤1.2uH | 6.6±0.2 | 6.6±0.2 | 2.8±0.2 | 1.4±0.3  | 5.5±0.3 | 1.55    | 2.5     | 5.6     |
| DHIM0630<br>L≥1.5uH | 6.6±0.2 | 6.6±0.2 | 2.9±0.2 | 1.4±0.3  | 5.5±0.3 | 1.55    | 2.5     | 5.6     |

## Description

- Assemblage design, sturdy structure .
- High inductance, high current, low magnetic loss, low ERS, Small parasitic capacitance.
- Flat wire winding, achieve a low DCR.
- Temperature rise current and saturation current is less influenced by environment.
- Placement form is SMD
- Applications: PAD/Notebook/Desktop/Server Applications. DC/DC converter.

## Part Number Code

DHIM0420-R10M



## Electrical Specifications-DHIM0420

| Part Number   | Inductance(uH)<br>(±20%) | DCR (mΩ) |        | Irms(Max)<br>(A) | Isat(Max)<br>(A) |
|---------------|--------------------------|----------|--------|------------------|------------------|
|               |                          | (Typ.)   | (Max.) |                  |                  |
| DHIM0420-R10M | 0.10                     | 2.3      | 2.5    | 18.2             | 37.8             |
| DHIM0420-R22M | 0.22                     | 4.2      | 4.7    | 16.5             | 19.4             |
| DHIM0420-R36M | 0.36                     | 5.7      | 6.5    | 14.6             | 16.9             |
| DHIM0420-R40M | 0.40                     | 7.1      | 7.9    | 13.9             | 15.3             |
| DHIM0420-R47M | 0.47                     | 7.8      | 8.8    | 12.3             | 14.2             |
| DHIM0420-R56M | 0.56                     | 8.5      | 9.5    | 11.8             | 13.9             |
| DHIM0420-R60M | 0.60                     | 8.8      | 9.7    | 11.5             | 13.5             |
| DHIM0420-R72M | 0.72                     | 10.6     | 11.9   | 10.7             | 11.8             |
| DHIM0420-1R0M | 1.00                     | 13.5     | 15.0   | 9.5              | 9.5              |
| DHIM0420-1R2M | 1.20                     | 16.4     | 18.1   | 8.8              | 8.8              |
| DHIM0420-1R5M | 1.50                     | 21.2     | 23.8   | 7.5              | 7.8              |
| DHIM0420-1R8M | 1.80                     | 25.3     | 28.5   | 6.8              | 7.3              |

## Electrical Specifications-DHIM0520

| Part Number   | Inductance(uH)<br>(±20%) | DCR (mΩ) |        | Irms(Max)<br>(A) | Isat(Max)<br>(A) |
|---------------|--------------------------|----------|--------|------------------|------------------|
|               |                          | (Typ.)   | (Max.) |                  |                  |
| DHIM0520-R15M | 0.15                     | 4.3      | 4.9    | 18.6             | 29.8             |
| DHIM0520-R16M | 0.16                     | 4.3      | 4.9    | 18.6             | 29.8             |
| DHIM0520-R33M | 0.33                     | 6.2      | 7.3    | 14.3             | 25.8             |
| DHIM0520-R47M | 0.47                     | 7.3      | 8.2    | 14.0             | 21.7             |
| DHIM0520-R56M | 0.56                     | 8.8      | 9.7    | 13.8             | 18.8             |
| DHIM0520-R68M | 0.68                     | 9.1      | 10.5   | 13.2             | 15.8             |
| DHIM0520-R80M | 0.80                     | 10.5     | 12.0   | 12.7             | 15.3             |
| DHIM0520-R82M | 0.82                     | 11.2     | 12.8   | 11.8             | 14.8             |
| DHIM0520-1R0M | 1.00                     | 12.3     | 14.1   | 10.1             | 14.3             |
| DHIM0520-1R2M | 1.20                     | 14.3     | 16.5   | 9.2              | 13.9             |
| DHIM0520-1R5M | 1.50                     | 16.5     | 19.0   | 8.5              | 13.1             |

- Special inquiries besides the above common used types can be meet on your requirement.
- $\Delta L/L = -30\%$ ,  $\Delta t = 20^\circ\text{C}$ .
- Inductance Tested at 100KHz, 0.1Vrms

## Electrical Specifications-DHIM0530

| Part Number   | Inductance(uH)<br>(±20%) | DCR (mΩ) |        | Irms(Max)<br>(A) | Isat(Max)<br>(A) |
|---------------|--------------------------|----------|--------|------------------|------------------|
|               |                          | (Typ.)   | (Max.) |                  |                  |
| DHIM0530-R15M | 0.15                     | 2.15     | 2.4    | 22.0             | 35.8             |
| DHIM0530-R16M | 0.16                     | 2.15     | 2.4    | 22.0             | 34.7             |
| DHIM0530-R33M | 0.33                     | 3.3      | 3.6    | 18.9             | 27.9             |
| DHIM0530-R47M | 0.47                     | 3.8      | 4.3    | 18.3             | 25.6             |
| DHIM0530-R56M | 0.56                     | 4.2      | 4.7    | 17.5             | 22.0             |
| DHIM0530-R60M | 0.6                      | 4.2      | 4.7    | 17.5             | 21.8             |
| DHIM0530-R80M | 0.8                      | 5.2      | 5.8    | 13.0             | 19.8             |
| DHIM0530-R82M | 0.82                     | 5.4      | 5.9    | 12.6             | 19.5             |
| DHIM0530-1R0M | 1.0                      | 7.1      | 7.9    | 12.0             | 16.2             |
| DHIM0530-1R2M | 1.2                      | 8.9      | 9.9    | 11.0             | 14.7             |
| DHIM0530-1R5M | 1.5                      | 10.3     | 11.5   | 10.4             | 13.6             |
| DHIM0530-1R8M | 1.8                      | 11.7     | 12.9   | 9.8              | 12.1             |
| DHIM0530-2R2M | 2.2                      | 13.3     | 14.8   | 9.5              | 9.8              |
| DHIM0530-3R3M | 3.3                      | 21.3     | 23.5   | 8.0              | 9.2              |
| DHIM0530-4R7M | 4.7                      | 33.2     | 36.7   | 5.6              | 8.0              |

## Electrical Specifications-DHIM0630

| Part Number   | Inductance(uH)<br>(±20%) | DCR (mΩ) |        | Irms(Max)<br>(A) | Isat(Max)<br>(A) |
|---------------|--------------------------|----------|--------|------------------|------------------|
|               |                          | (Typ.)   | (Max.) |                  |                  |
| DHIM0630-R18M | 0.18                     | 1.8      | 2.0    | 31.5             | 40.0             |
| DHIM0630-R33M | 0.33                     | 2.3      | 2.6    | 24.8             | 31.8             |
| DHIM0630-R56M | 0.56                     | 3.1      | 3.5    | 21.6             | 28.8             |
| DHIM0630-R68M | 0.68                     | 4.9      | 5.3    | 19.8             | 24.7             |
| DHIM0630-1R0M | 1.0                      | 5.7      | 6.3    | 17.7             | 22.6             |
| DHIM0630-1R2M | 1.2                      | 6.9      | 7.7    | 15.8             | 21.7             |
| DHIM0630-1R5M | 1.5                      | 8.5      | 9.4    | 14.5             | 20.0             |
| DHIM0630-1R8M | 1.8                      | 9.5      | 10.5   | 13.6             | 18.0             |
| DHIM0630-2R2M | 2.2                      | 11.3     | 12.6   | 9.8              | 15.4             |
| DHIM0630-3R3M | 3.3                      | 19.0     | 21.2   | 8.0              | 11.8             |
| DHIM0630-4R5M | 4.5                      | 23.3     | 25.7   | 6.9              | 9.6              |
| DHIM0630-4R7M | 4.7                      | 23.5     | 26.0   | 6.6              | 9.5              |