

# Iron powder core loop inductance HRT 44-80Series



## Features

- Cast affection design.
- Wound on iron powder material toroidal are used in the wide variety of power
- Conversion application.
- Easy PC board mounting

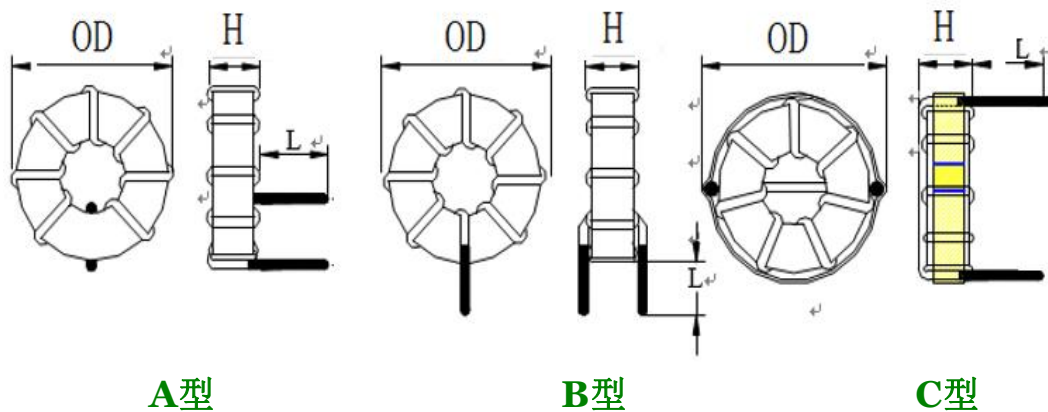
## Application

- Switching power source Desk Top  
Note Book Charger

## Tolerance

- ( K 10% , M 20% )

## Configurations & Dimensions



## Dimensions

## Chip Size

## Units:mm

| TYPE    | OD max | H max | L min |     |
|---------|--------|-------|-------|-----|
| HRT4452 | 15     | 8.5   | 3.5   | A 型 |
| HRT5052 | 18     | 9.5   | 3.5   |     |
| HRT6052 | 21     | 10.5  | 3.5   |     |
| HRT6852 | 22     | 9.5   | 3.5   |     |
| HRT8052 | 26     | 12    | 3.5   |     |
| HRT4452 | 15     | 8.5   | 3.5   | B 型 |
| HRT5052 | 18     | 9.5   | 3.5   |     |
| HRT6052 | 21     | 10.5  | 3.5   |     |
| HRT6852 | 22     | 9.5   | 3.5   |     |
| HRT8052 | 26     | 12    | 3.5   |     |
| HRT4452 | 15     | 9     | 3.5   | C 型 |
| HRT5052 | 18     | 10    | 3.5   |     |
| HRT6052 | 21     | 11    | 3.5   |     |
| HRT6852 | 22     | 10    | 3.5   |     |
| HRT8052 | 26     | 12    | 3.5   |     |

# Iron powder core loop inductance

## HRT 4452 5052 Series



### Specifications HRT4452

| Part Number  | Inductance (uH) | Test Frequency (KHz) | Isat (A) max | $\Delta L/L0$ @Irate | DC Resistance ( $\Omega$ Max) |
|--------------|-----------------|----------------------|--------------|----------------------|-------------------------------|
| HRT4452-1R0N | 1.0             | 0.1V/100             | 12.00        | $\leq 30\%$          | 0.010                         |
| HRT4452-2R2N | 2.2             | 0.1V/100             | 8.00         | $\leq 30\%$          | 0.015                         |
| HRT4452-3R3N | 3.3             | 0.1V/100             | 7.00         | $\leq 30\%$          | 0.030                         |
| HRT4452-4R7N | 4.7             | 0.1V/100             | 6.00         | $\leq 30\%$          | 0.030                         |
| HRT4452-6R8N | 6.8             | 0.1V/100             | 5.00         | $\leq 30\%$          | 0.040                         |
| HRT4452-100M | 10              | 0.1V/100             | 4.00         | $\leq 30\%$          | 0.045                         |
| HRT4452-150M | 15              | 0.1V/100             | 3.20         | $\leq 30\%$          | 0.045                         |
| HRT4452-220M | 22              | 0.1V/100             | 2.70         | $\leq 30\%$          | 0.050                         |
| HRT4452-330M | 33              | 0.1V/100             | 2.20         | $\leq 30\%$          | 0.060                         |
| HRT4452-470M | 47              | 0.1V/100             | 1.80         | $\leq 30\%$          | 0.070                         |
| HRT4452-680M | 68              | 0.1V/100             | 1.50         | $\leq 30\%$          | 0.075                         |
| HRT4452-101M | 100             | 0.1V/100             | 1.20         | $\leq 30\%$          | 0.120                         |
| HRT4452-151M | 150             | 0.1V/100             | 1.00         | $\leq 30\%$          | 0.140                         |
| HRT4452-221M | 220             | 0.1V/100             | 0.80         | $\leq 30\%$          | 0.220                         |
| HRT4452-331M | 330             | 0.1V/100             | 0.70         | $\leq 30\%$          | 0.260                         |
| HRT4452-471M | 470             | 0.1V/100             | 0.60         | $\leq 30\%$          | 0.360                         |
| HRT4452-681M | 680             | 0.1V/100             | 0.50         | $\leq 30\%$          | 0.590                         |
| HRT4452-102M | 1000            | 0.1V/100             | 0.40         | $\leq 30\%$          | 0.900                         |

### Specifications HRT5052

| Part Number  | Inductance (uH) | Test Frequency (KHz) | Isat (A) max | $\Delta L/L0$ @Irate | DC Resistance ( $\Omega$ Max) |
|--------------|-----------------|----------------------|--------------|----------------------|-------------------------------|
| HRT5052-1R5N | 1.5             | 0.1V/100             | 12.00        | $\leq 30\%$          | 0.010                         |
| HRT5052-2R2N | 2.2             | 0.1V/100             | 10.00        | $\leq 30\%$          | 0.010                         |
| HRT5052-3R3N | 3.3             | 0.1V/100             | 8.00         | $\leq 30\%$          | 0.015                         |
| HRT5052-4R7N | 4.7             | 0.1V/100             | 7.00         | $\leq 30\%$          | 0.015                         |
| HRT5052-6R8N | 6.8             | 0.1V/100             | 6.00         | $\leq 30\%$          | 0.015                         |
| HRT5052-100M | 10              | 0.1V/100             | 4.50         | $\leq 30\%$          | 0.020                         |
| HRT5052-150M | 15              | 0.1V/100             | 3.80         | $\leq 30\%$          | 0.030                         |
| HRT5052-220M | 22              | 0.1V/100             | 3.20         | $\leq 30\%$          | 0.045                         |
| HRT5052-330M | 33              | 0.1V/100             | 2.70         | $\leq 30\%$          | 0.045                         |
| HRT5052-470M | 47              | 0.1V/100             | 2.20         | $\leq 30\%$          | 0.050                         |
| HRT5052-680M | 68              | 0.1V/100             | 1.80         | $\leq 30\%$          | 0.060                         |
| HRT5052-101M | 100             | 0.1V/100             | 1.40         | $\leq 30\%$          | 0.110                         |
| HRT5052-151M | 150             | 0.1V/100             | 1.20         | $\leq 30\%$          | 0.130                         |
| HRT5052-221M | 220             | 0.1V/100             | 1.00         | $\leq 30\%$          | 0.160                         |
| HRT5052-331M | 330             | 0.1V/100             | 0.80         | $\leq 30\%$          | 0.200                         |
| HRT5052-471M | 470             | 0.1V/100             | 0.70         | $\leq 30\%$          | 0.340                         |
| HRT5052-681M | 680             | 0.1V/100             | 0.58         | $\leq 30\%$          | 0.430                         |
| HRT5052-102M | 1000            | 0.1V/100             | 0.45         | $\leq 30\%$          | 0.590                         |

# Iron powder core loop inductance

## HRT 6052 6852Series



### Specifications HRT6052

| Part Number  | Inductance (uH) | Test Frequency (KHz) | Isat (A) max | $\Delta L/L0$ @Irate | DC Resistance ( $\Omega$ Max) |
|--------------|-----------------|----------------------|--------------|----------------------|-------------------------------|
| HRT6052-2R5N | 2.5             | 0.1V/100             | 13.50        | $\leq 30\%$          | 0.010                         |
| HRT6052-3R3N | 3.3             | 0.1V/100             | 12.00        | $\leq 30\%$          | 0.015                         |
| HRT6052-220M | 22              | 0.1V/100             | 4.50         | $\leq 30\%$          | 0.045                         |
| HRT6052-900M | 90              | 0.1V/100             | 2.20         | $\leq 30\%$          | 0.075                         |
| HRT6052-151M | 150             | 0.1V/100             | 1.70         | $\leq 30\%$          | 0.090                         |

### Specifications HRT6852

| Part Number  | Inductance (uH) | Test Frequency (KHz) | Isat (A) max | $\Delta L/L0$ @Irate | DC Resistance ( $\Omega$ Max) |
|--------------|-----------------|----------------------|--------------|----------------------|-------------------------------|
| HRT6852-4R7N | 4.7             | 0.1V/100             | 10.00        | $\leq 30\%$          | 0.015                         |
| HRT6852-6R8N | 6.8             | 0.1V/100             | 8.00         | $\leq 30\%$          | 0.015                         |
| HRT6852-100M | 10              | 0.1V/100             | 7.00         | $\leq 30\%$          | 0.020                         |
| HRT6852-150M | 15              | 0.1V/100             | 5.80         | $\leq 30\%$          | 0.030                         |
| HRT6852-220M | 22              | 0.1V/100             | 4.80         | $\leq 30\%$          | 0.030                         |
| HRT6852-330M | 33              | 0.1V/100             | 3.80         | $\leq 30\%$          | 0.040                         |
| HRT6852-470M | 47              | 0.1V/100             | 3.00         | $\leq 30\%$          | 0.045                         |
| HRT6852-680M | 68              | 0.1V/100             | 2.50         | $\leq 30\%$          | 0.060                         |
| HRT6852-101M | 100             | 0.1V/100             | 2.20         | $\leq 30\%$          | 0.065                         |
| HRT6852-151M | 150             | 0.1V/100             | 1.80         | $\leq 30\%$          | 0.100                         |
| HRT6852-221M | 220             | 0.1V/100             | 1.50         | $\leq 30\%$          | 0.120                         |
| HRT6852-331M | 330             | 0.1V/100             | 1.20         | $\leq 30\%$          | 0.200                         |
| HRT6852-471M | 470             | 0.1V/100             | 1.00         | $\leq 30\%$          | 0.250                         |
| HRT6852-681M | 680             | 0.1V/100             | 0.80         | $\leq 30\%$          | 0.280                         |
| HRT6852-102M | 1000            | 0.1V/100             | 0.70         | $\leq 30\%$          | 0.440                         |



## Specifications HRT8052

| Part Number  | Inductance (uH) | Test Frequency (KHz) | Isat (A) max | $\Delta L/L0$ @Irate | DC Resistance ( $\Omega$ Max) |
|--------------|-----------------|----------------------|--------------|----------------------|-------------------------------|
| HRT8052-4R7N | 4.7             | 0.1V/100             | 12.00        | $\leq 30\%$          | 0.015                         |
| HRT8052-6R8N | 6.8             | 0.1V/100             | 10.00        | $\leq 30\%$          | 0.015                         |
| HRT8052-100M | 10              | 0.1V/100             | 8.00         | $\leq 30\%$          | 0.020                         |
| HRT8052-150M | 15              | 0.1V/100             | 7.00         | $\leq 30\%$          | 0.020                         |
| HRT8052-220M | 22              | 0.1V/100             | 6.00         | $\leq 30\%$          | 0.030                         |
| HRT8052-330M | 33              | 0.1V/100             | 4.70         | $\leq 30\%$          | 0.035                         |
| HRT8052-470M | 47              | 0.1V/100             | 4.00         | $\leq 30\%$          | 0.040                         |
| HRT8052-680M | 68              | 0.1V/100             | 3.30         | $\leq 30\%$          | 0.045                         |
| HRT8052-101M | 100             | 0.1V/100             | 2.70         | $\leq 30\%$          | 0.060                         |
| HRT8052-151M | 150             | 0.1V/100             | 2.20         | $\leq 30\%$          | 0.070                         |
| HRT8052-221M | 220             | 0.1V/100             | 1.80         | $\leq 30\%$          | 0.080                         |
| HRT8052-331M | 330             | 0.1V/100             | 1.50         | $\leq 30\%$          | 0.120                         |
| HRT8052-471M | 470             | 0.1V/100             | 1.20         | $\leq 30\%$          | 0.200                         |
| HRT8052-681M | 680             | 0.1V/100             | 1.00         | $\leq 30\%$          | 0.240                         |
| HRT8052-102M | 1000            | 0.1V/100             | 0.85         | $\leq 30\%$          | 0.370                         |