

## Wire Wound SMD Power Inductors -HNR Series

Operating temperature range:  
-40 °C~ + 125 °C (Including self-heating)



## FEATURES

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
- Metallization on ferrite core results in excellent shock resistance and damage-free durability
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- 30% higher current rating than conventional inductors of equal size
- Takes up less PCB real estate and save more power

|                                                                                                                                                                                             |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 特征                                                                                                                                                                                        |  |
| <ul style="list-style-type: none"> <li>• 磁性膠水塗敷結構極大減少了蜂鳴聲</li> <li>• 在磁芯上金屬化電極，抗跌落沖擊強，經久耐用</li> <li>• 閉合磁路結構設計，漏磁少，抗 EMI 能力強</li> <li>• 電流特性較同等尺寸傳統電感高出 30%以上</li> <li>• 省空間，更省電</li> </ul> |  |

## APPLICATIONS

- Smart phone, smart TV, set top box, notebook
- Car navigation systems, telecomm base stations
- VR, AR
- LED lighting
- SSD, Bluetooth, Wi-Fi module
- NB-IOT, Bluetooth headset, Smartspeakers

## 1 用途

- 智能手機，智能電視，機頂盒，筆記本電腦
- 汽車導航系統，通信設備
- 虛擬現實，增強現實
- LED 照明
- 固態硬盤、藍牙、W 壓 1 模塊
- 物聯網模塊、藍牙耳機、智能音箱

## PRODUCT IDENTIFICATION

### HNR3015 -- 1R0 M

|     |                               |   |   |
|-----|-------------------------------|---|---|
| ①   | ②                             | ③ | ④ |
| ①   | Type                          |   |   |
| HNR | Wire Wound SMD Power Inductor |   |   |

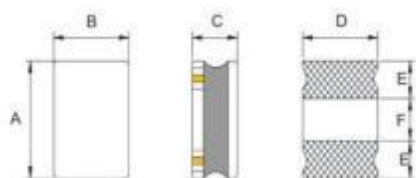
### ③ Nominal Inductance

| Example | Nominal Value |
|---------|---------------|
| 1R0     | 1.0uH         |
| 100     | 10uH          |

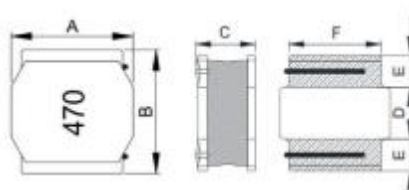
### ④ Inductance Tolerance

|   |      |
|---|------|
| K | ±10% |
| M | ±20% |
| N | ±30% |

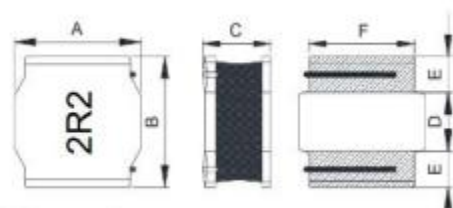
| ② External Dimensions (LxWxH) [mm] |              |
|------------------------------------|--------------|
| 252010                             | 2.5x2.0x1.0  |
| 252012                             | 2.5x2.0x1.25 |
| 3010                               | 3.0x3.0x1.0  |
| 3012                               | 3.0x3.0x1.2  |
| 3015                               | 3.0x3.0x1.5  |
| 3021                               | 3.0x3.0x2.1  |
| 4010                               | 4.0x4.0x1.0  |
| 4012                               | 4.0x4.0x1.2  |
| 4015                               | 4.0x4.0x1.5  |
| 4018                               | 4.0x4.0x1.8  |
| 4020                               | 4.0x4.0x2.0  |
| 4026                               | 4.0x4.0x2.6  |
| 4030                               | 4.0x4.0x3.0  |
| 5012                               | 5.0x5.0x1.2  |
| 5015                               | 5.0x5.0x1.5  |
| 5020                               | 5.0x5.0x2.0  |
| 5030                               | 5.0x5.0x3.0  |
| 5040                               | 5.0x5.0x4.0  |
| 5045                               | 5.0x5.0x4.5  |
| 6020                               | 6.0x6.0x2.0  |
| 6028                               | 6.0x6.0x2.8  |
| 6040                               | 6.0x6.0x4.0  |
| 6045                               | 6.0x6.0x4.5  |
| 8040                               | 8.0x8.0x4.0  |
| 8050                               | 8.0x8.0x5.0  |
| 8065                               | 8.0x8.0x6.5  |



ZP-1 (4 边形)



ZP-2 (8 边形)



ZP-3 (12 边形)

## I SHAPE AND DIMENSIONS

Unit: mm

| Series     | A       | B       | C        | D       | E        | F        | ATyp. | BTyp. | CTyp. |
|------------|---------|---------|----------|---------|----------|----------|-------|-------|-------|
| HNR252010S | 2.5±0.1 | 2.0±0.1 | 1.0Max.  | 2.0±0.2 | 0.80±0.2 | 0.80±0.2 | 0.80  | 0.85  | 2.0   |
| HNR252012S | 2.5±0.1 | 2.0±0.1 | 1.25Max. | 2.0±0.2 | 0.80±0.2 | 0.80±0.2 | 0.80  | 0.85  | 2.0   |
| HNR3010S   | 3.0±0.2 | 3.0±0.2 | 1.0Max.  | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5   | 0.8   | 2.7   |
| HNR3012S   | 3.0±0.2 | 3.0±0.2 | 1.2Max.  | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5   | 0.8   | 2.7   |
| HNR3015S   | 3.0±0.2 | 3.0±0.2 | 1.5Max.  | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5   | 0.8   | 2.7   |
| HNR3021S   | 3.0±0.2 | 3.0±0.2 | 2.35Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5   | 0.8   | 2.7   |
| HNR4010S   | 4.0±0.2 | 4.0±0.2 | 1.0Max.  | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9   | 1.1   | 3.7   |
| HNR4012S   | 4.0±0.2 | 4.0±0.2 | 1.2Max.  | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9   | 1.1   | 3.7   |
| HNR4015S   | 4.0±0.2 | 4.0±0.2 | 1.65Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9   | 1.1   | 3.7   |
| HNR4018S   | 4.0±0.2 | 4.0±0.2 | 1.8Max.  | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9   | 1.1   | 3.7   |
| HNR4020S   | 4.0±0.2 | 4.0±0.2 | 2.0Max.  | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9   | 1.1   | 3.7   |
| HNR4026S   | 4.0±0.2 | 4.0±0.2 | 2.6Max.  | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9   | 1.1   | 3.7   |
| HNR4030S   | 4.0±0.2 | 4.0±0.2 | 3.0Max.  | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9   | 1.1   | 3.7   |
| HNR5012S   | 5.0±0.2 | 5.0±0.2 | 1.2Max.  | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3   | 1.4   | 4.2   |
| HNR5015S   | 5.0±0.2 | 5.0±0.2 | 1.5Max.  | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3   | 1.4   | 4.2   |
| HNR5020S   | 5.0±0.2 | 5.0±0.2 | 2.0Max.  | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3   | 1.4   | 4.2   |
| HNR5030S   | 5.0±0.2 | 5.0±0.2 | 3.0Max.  | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3   | 1.4   | 4.2   |
| HNR5040S   | 5.0±0.2 | 5.0±0.2 | 4.0Max.  | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3   | 1.4   | 4.2   |
| HNR5045S   | 5.0±0.2 | 5.0±0.2 | 4.5Max.  | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3   | 1.4   | 4.2   |
| HNR6020S   | 6.0±0.3 | 6.0±0.3 | 2.0Max.  | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8   | 1.7   | 5.7   |
| HNR6028S   | 6.0±0.3 | 6.0±0.3 | 2.8Max.  | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8   | 1.7   | 5.7   |
| HNR6040S   | 6.0±0.3 | 6.0±0.3 | 4.0Max.  | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8   | 1.7   | 5.7   |
| HNR6045S   | 6.0±0.3 | 6.0±0.3 | 4.5Max.  | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8   | 1.7   | 5.7   |
| HNR8040S   | 8.0±0.3 | 8.0±0.3 | 4.2Max.  | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8   | 2.2   | 7.5   |
| HNR8050S   | 8.0±0.3 | 8.0±0.3 | 5.0Max.  | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8   | 2.2   | 7.5   |
| HNR8065S   | 8.0±0.3 | 8.0±0.3 | 6.5Max.  | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8   | 2.2   | 7.5   |

## SPECIFICATIONS

## HNR252010S Series

| Part Number    | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|----------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|                | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units          | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol         | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR252010-R47N | 0.47 $\pm$ 30% | 0.056         | 0.047 | 206                     | 2.50                 | 3.35 | 2.35                  | 2.56 |
| HNR252010-R56N | 0.56 $\pm$ 30% | 0.072         | 0.060 | 160                     | 2.90                 | 3.20 | 2.00                  | 2.18 |
| HNR252010-R68N | 0.68 $\pm$ 30% | 0.074         | 0.062 | 129                     | 2.20                 | 2.75 | 2.00                  | 2.18 |
| HNR252010-1R0N | 1.0 $\pm$ 30%  | 0.108         | 0.090 | 100                     | 1.85                 | 2.20 | 1.65                  | 1.80 |
| HNR252010-1R5N | 1.5 $\pm$ 30%  | 0.182         | 0.152 | 81                      | 1.80                 | 2.10 | 1.30                  | 1.42 |
| HNR252010-2R2N | 2.2 $\pm$ 30%  | 0.209         | 0.174 | 61                      | 1.20                 | 1.60 | 1.20                  | 1.31 |
| HNR252010-3R3M | 3.3 $\pm$ 20%  | 0.328         | 0.273 | 47                      | 1.05                 | 1.30 | 0.90                  | 0.98 |
| HNR252010-4R7M | 4.7 $\pm$ 20%  | 0.563         | 0.469 | 42                      | 0.95                 | 1.15 | 0.70                  | 0.76 |
| HNR252010-5R6M | 5.6 $\pm$ 20%  | 0.563         | 0.469 | 35                      | 0.80                 | 0.95 | 0.73                  | 0.80 |
| HNR252010-6R8M | 6.8 $\pm$ 20%  | 0.896         | 0.747 | 31                      | 0.78                 | 0.92 | 0.59                  | 0.64 |
| HNR252010-100M | 10 $\pm$ 20%   | 1.092         | 0.910 | 27                      | 0.65                 | 0.78 | 0.50                  | 0.55 |

## HNR252012S Series

| Part Number    | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|----------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|                | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units          | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol         | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR252012-R47N | 0.47 $\pm$ 30% | 0.061         | 0.047 | 160                     | 3.82                 | 4.27 | 2.15                  | 2.34 |
| HNR252012-R68N | 0.68 $\pm$ 30% | 0.074         | 0.057 | 140                     | 3.28                 | 3.68 | 1.95                  | 2.13 |
| HNR252012-1R0N | 1.0 $\pm$ 30%  | 0.090         | 0.069 | 110                     | 2.59                 | 2.90 | 1.93                  | 2.10 |
| HNR252012-1R2N | 1.2 $\pm$ 30%  | 0.129         | 0.099 | 100                     | 2.38                 | 2.67 | 1.46                  | 1.59 |
| HNR252012-1R5M | 1.5 $\pm$ 20%  | 0.147         | 0.113 | 97                      | 2.24                 | 2.51 | 1.40                  | 1.53 |
| HNR252012-2R2M | 2.2 $\pm$ 20%  | 0.216         | 0.166 | 69                      | 1.85                 | 2.07 | 1.15                  | 1.25 |
| HNR252012-2R7M | 2.7 $\pm$ 20%  | 0.239         | 0.184 | 63                      | 1.72                 | 1.92 | 1.09                  | 1.19 |
| HNR252012-3R3M | 3.3 $\pm$ 20%  | 0.264         | 0.203 | 62                      | 1.61                 | 1.80 | 1.04                  | 1.13 |
| HNR252012-3R6M | 3.6 $\pm$ 20%  | 0.348         | 0.268 | 53                      | 1.46                 | 1.64 | 0.90                  | 0.98 |
| HNR252012-4R3M | 4.3 $\pm$ 20%  | 0.377         | 0.290 | 51                      | 1.37                 | 1.53 | 0.87                  | 0.95 |
| HNR252012-4R7M | 4.7 $\pm$ 20%  | 0.377         | 0.290 | 47                      | 1.12                 | 1.25 | 0.84                  | 0.92 |
| HNR252012-5R1M | 5.1 $\pm$ 20%  | 0.500         | 0.385 | 44                      | 1.23                 | 1.37 | 0.75                  | 0.82 |
| HNR252012-5R6M | 5.6 $\pm$ 20%  | 0.538         | 0.414 | 38                      | 1.11                 | 1.25 | 0.73                  | 0.80 |
| HNR252012-6R2M | 6.2 $\pm$ 20%  | 0.542         | 0.417 | 38                      | 1.03                 | 1.16 | 0.73                  | 0.80 |
| HNR252012-6R8M | 6.8 $\pm$ 20%  | 0.581         | 0.447 | 38                      | 0.98                 | 1.09 | 0.69                  | 0.75 |
| HNR252012-7R5M | 7.5 $\pm$ 20%  | 0.611         | 0.470 | 35                      | 0.97                 | 1.09 | 0.68                  | 0.74 |
| HNR252012-8R2M | 8.2 $\pm$ 20%  | 0.658         | 0.506 | 36                      | 0.98                 | 1.10 | 0.65                  | 0.71 |
| HNR252012-9R1M | 9.1 $\pm$ 20%  | 0.690         | 0.531 | 34                      | 0.91                 | 1.02 | 0.62                  | 0.68 |
| HNR252012-100M | 10 $\pm$ 20%   | 0.690         | 0.531 | 34                      | 0.79                 | 0.88 | 0.62                  | 0.68 |
| HNR252012-120M | 12 $\pm$ 20%   | 1.075         | 0.827 | 28                      | 0.78                 | 0.88 | 0.51                  | 0.56 |
| HNR252012-150M | 15 $\pm$ 20%   | 1.591         | 1.224 | 25                      | 0.68                 | 0.77 | 0.42                  | 0.46 |
| HNR252012-220M | 22 $\pm$ 20%   | 1.976         | 1.520 | 20                      | 0.53                 | 0.59 | 0.38                  | 0.41 |

## SPECIFICATIONS

## HNR3010S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR3010-1R0N | 1.0 $\pm$ 30% | 0.085         | 0.065 | 180                     | 1.40                 | 2.10 | 1.45                  | 1.80 |
| HNR3010-1R2N | 1.2 $\pm$ 30% | 0.085         | 0.065 | 137                     | 1.25                 | 1.70 | 1.45                  | 1.80 |
| HNR3010-1R5N | 1.5 $\pm$ 30% | 0.104         | 0.080 | 120                     | 1.27                 | 1.70 | 1.30                  | 1.60 |
| HNR3010-2R2N | 2.2 $\pm$ 30% | 0.143         | 0.110 | 100                     | 1.15                 | 1.50 | 1.09                  | 1.40 |
| HNR3010-2R7N | 2.7 $\pm$ 30% | 0.169         | 0.130 | 90                      | 1.00                 | 1.20 | 1.02                  | 1.40 |
| HNR3010-3R3N | 3.3 $\pm$ 30% | 0.189         | 0.145 | 74                      | 0.97                 | 1.20 | 0.96                  | 1.20 |
| HNR3010-3R6M | 3.6 $\pm$ 20% | 0.215         | 0.165 | 67                      | 0.95                 | 1.20 | 0.90                  | 1.10 |
| HNR3010-4R7M | 4.7 $\pm$ 20% | 0.293         | 0.225 | 59                      | 0.75                 | 1.05 | 0.77                  | 1.10 |
| HNR3010-5R6M | 5.6 $\pm$ 20% | 0.322         | 0.248 | 40                      | 0.58                 | 0.65 | 0.70                  | 1.05 |
| HNR3010-6R8M | 6.8 $\pm$ 20% | 0.397         | 0.305 | 42                      | 0.55                 | 0.72 | 0.66                  | 0.96 |
| HNR3010-8R2M | 8.2 $\pm$ 20% | 0.520         | 0.400 | 23                      | 0.55                 | 0.70 | 0.58                  | 0.70 |
| HNR3010-100M | 10 $\pm$ 20%  | 0.520         | 0.400 | 39                      | 0.55                 | 0.75 | 0.58                  | 0.70 |
| HNR3010-120M | 12 $\pm$ 20%  | 0.657         | 0.505 | 36                      | 0.43                 | 0.65 | 0.52                  | 0.67 |
| HNR3010-150M | 15 $\pm$ 20%  | 0.793         | 0.610 | 30                      | 0.42                 | 0.57 | 0.47                  | 0.57 |
| HNR3010-220M | 22 $\pm$ 20%  | 1.209         | 0.930 | 28                      | 0.35                 | 0.48 | 0.38                  | 0.52 |
| HNR3010-270M | 27 $\pm$ 20%  | 1.404         | 1.080 | 25                      | 0.30                 | 0.45 | 0.35                  | 0.50 |
| HNR3010-330M | 33 $\pm$ 20%  | 2.015         | 1.550 | 18                      | 0.29                 | 0.42 | 0.30                  | 0.55 |
| HNR3010-390M | 39 $\pm$ 20%  | 2.275         | 1.750 | 18                      | 0.28                 | 0.38 | 0.28                  | 0.53 |
| HNR3010-430M | 43 $\pm$ 20%  | 2.340         | 1.800 | 18                      | 0.23                 | 0.36 | 0.27                  | 0.52 |
| HNR3010-470M | 47 $\pm$ 20%  | 2.535         | 1.950 | 18                      | 0.22                 | 0.35 | 0.26                  | 0.52 |
| HNR3010-510M | 51 $\pm$ 20%  | 2.860         | 2.200 | 18                      | 0.21                 | 0.33 | 0.25                  | 0.48 |
| HNR3010-560M | 56 $\pm$ 20%  | 3.016         | 2.320 | 16                      | 0.21                 | 0.28 | 0.24                  | 0.35 |

## HNR3012S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR3012-R22N | 0.22 $\pm$ 30% | 0.022         | 0.017 | 321                     | 5.30                 | 6.00 | 3.00                  | 3.30 |
| HNR3012-R82N | 0.82 $\pm$ 30% | 0.039         | 0.030 | 180                     | 2.05                 | 2.80 | 2.47                  | 3.00 |
| HNR3012-1R0N | 1.0 $\pm$ 30%  | 0.052         | 0.040 | 120                     | 1.87                 | 2.80 | 2.20                  | 2.70 |
| HNR3012-1R2N | 1.2 $\pm$ 30%  | 0.059         | 0.045 | 120                     | 2.22                 | 2.50 | 2.01                  | 2.20 |
| HNR3012-1R5N | 1.5 $\pm$ 30%  | 0.059         | 0.045 | 110                     | 1.62                 | 1.90 | 2.01                  | 2.20 |
| HNR3012-1R8N | 1.8 $\pm$ 30%  | 0.082         | 0.063 | 90                      | 1.30                 | 1.90 | 1.65                  | 1.80 |
| HNR3012-2R2N | 2.2 $\pm$ 30%  | 0.098         | 0.075 | 84                      | 1.20                 | 1.90 | 1.55                  | 1.70 |
| HNR3012-2R4N | 2.4 $\pm$ 30%  | 0.088         | 0.068 | 100                     | 1.15                 | 1.50 | 1.60                  | 1.70 |
| HNR3012-2R7N | 2.7 $\pm$ 30%  | 0.110         | 0.085 | 65                      | 1.14                 | 1.50 | 1.48                  | 1.50 |
| HNR3012-3R3M | 3.3 $\pm$ 20%  | 0.130         | 0.100 | 64                      | 1.05                 | 1.50 | 1.36                  | 1.40 |
| HNR3012-3R6M | 3.6 $\pm$ 20%  | 0.130         | 0.100 | 36                      | 1.05                 | 1.50 | 1.36                  | 1.40 |
| HNR3012-3R9M | 3.9 $\pm$ 20%  | 0.189         | 0.145 | 61                      | 1.00                 | 1.30 | 1.24                  | 1.30 |
| HNR3012-4R7M | 4.7 $\pm$ 20%  | 0.156         | 0.120 | 61                      | 0.90                 | 1.00 | 1.24                  | 1.30 |
| HNR3012-5R6M | 5.6 $\pm$ 20%  | 0.226         | 0.174 | 61                      | 0.80                 | 1.10 | 1.13                  | 1.24 |
| HNR3012-6R8M | 6.8 $\pm$ 20%  | 0.247         | 0.190 | 61                      | 0.75                 | 0.90 | 0.98                  | 1.10 |
| HNR3012-100M | 10 $\pm$ 20%   | 0.345         | 0.265 | 42                      | 0.60                 | 0.88 | 0.83                  | 0.90 |
| HNR3012-120M | 12 $\pm$ 20%   | 0.449         | 0.345 | 32                      | 0.48                 | 0.67 | 0.73                  | 0.84 |
| HNR3012-150M | 15 $\pm$ 20%   | 0.468         | 0.360 | 27                      | 0.45                 | 0.62 | 0.71                  | 0.77 |
| HNR3012-180M | 18 $\pm$ 20%   | 0.709         | 0.545 | 25                      | 0.43                 | 0.59 | 0.58                  | 0.65 |

## I SPECIFICATIONS

## HNR3012S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR3012-220M | 22 $\pm$ 20%  | 0.839         | 0.645 | 23                      | 0.42                 | 0.52 | 0.53                  | 0.59 |
| HNR3012-270M | 27 $\pm$ 20%  | 1.131         | 0.870 | 21                      | 0.35                 | 0.48 | 0.47                  | 0.51 |
| HNR3012-330M | 33 $\pm$ 20%  | 1.138         | 0.875 | 18                      | 0.36                 | 0.46 | 0.46                  | 0.50 |
| HNR3012-360M | 36 $\pm$ 20%  | 1.235         | 0.950 | 18                      | 0.34                 | 0.44 | 0.44                  | 0.48 |
| HNR3012-390M | 39 $\pm$ 20%  | 1.729         | 1.330 | 18                      | 0.30                 | 0.39 | 0.37                  | 0.41 |
| HNR3012-470M | 47 $\pm$ 20%  | 1.885         | 1.450 | 14                      | 0.27                 | 0.35 | 0.35                  | 0.40 |
| HNR3012-560M | 56 $\pm$ 20%  | 1.794         | 1.380 | 9                       | 0.26                 | 0.33 | 0.28                  | 0.40 |
| HNR3012-680M | 68 $\pm$ 20%  | 2.171         | 1.670 | 7                       | 0.24                 | 0.29 | 0.33                  | 0.37 |
| HNR3012-820M | 82 $\pm$ 20%  | 3.302         | 2.540 | 7                       | 0.17                 | 0.27 | 0.27                  | 0.31 |
| HNR3012-101M | 100 $\pm$ 20% | 3.718         | 2.860 | 5                       | 0.21                 | 0.23 | 0.25                  | 0.29 |

## HNR3015S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR3015-R50N | 0.5 $\pm$ 30% | 0.039         | 0.030 | 162                     | 3.90                 | 4.20 | 2.60                  | 2.80 |
| HNR3015-1R0N | 1.0 $\pm$ 30% | 0.039         | 0.030 | 150                     | 2.32                 | 2.80 | 2.35                  | 2.50 |
| HNR3015-1R2N | 1.2 $\pm$ 30% | 0.052         | 0.040 | 110                     | 2.21                 | 3.10 | 1.95                  | 2.30 |
| HNR3015-1R5N | 1.5 $\pm$ 30% | 0.065         | 0.050 | 100                     | 2.00                 | 2.70 | 1.70                  | 2.20 |
| HNR3015-1R8N | 1.8 $\pm$ 30% | 0.065         | 0.050 | 92                      | 1.75                 | 2.20 | 1.70                  | 2.20 |
| HNR3015-2R2N | 2.2 $\pm$ 30% | 0.078         | 0.060 | 86                      | 1.60                 | 2.00 | 1.60                  | 2.00 |
| HNR3015-2R7N | 2.7 $\pm$ 30% | 0.098         | 0.075 | 64                      | 1.52                 | 1.90 | 1.43                  | 1.90 |
| HNR3015-3R3M | 3.3 $\pm$ 20% | 0.104         | 0.080 | 68                      | 1.32                 | 1.81 | 1.36                  | 1.60 |
| HNR3015-3R6M | 3.6 $\pm$ 20% | 0.137         | 0.105 | 59                      | 1.28                 | 1.60 | 1.20                  | 1.50 |
| HNR3015-3R9M | 3.9 $\pm$ 20% | 0.137         | 0.105 | 47                      | 1.20                 | 1.40 | 1.20                  | 1.50 |
| HNR3015-4R3M | 4.3 $\pm$ 20% | 0.150         | 0.115 | 53                      | 1.20                 | 1.40 | 1.14                  | 1.30 |
| HNR3015-4R7M | 4.7 $\pm$ 20% | 0.163         | 0.125 | 46                      | 1.10                 | 1.40 | 1.09                  | 1.30 |
| HNR3015-5R1M | 5.1 $\pm$ 20% | 0.173         | 0.133 | 49                      | 1.00                 | 1.20 | 1.05                  | 1.20 |
| HNR3015-6R2M | 6.2 $\pm$ 20% | 0.254         | 0.195 | 46                      | 1.00                 | 1.20 | 0.86                  | 1.00 |
| HNR3015-6R8M | 6.8 $\pm$ 20% | 0.260         | 0.200 | 39                      | 0.85                 | 1.10 | 0.85                  | 1.10 |
| HNR3015-100M | 10 $\pm$ 20%  | 0.325         | 0.250 | 41                      | 0.72                 | 0.92 | 0.77                  | 0.90 |
| HNR3015-120M | 12 $\pm$ 20%  | 0.416         | 0.320 | 32                      | 0.70                 | 0.90 | 0.68                  | 0.89 |
| HNR3015-150M | 15 $\pm$ 20%  | 0.455         | 0.350 | 30                      | 0.66                 | 0.88 | 0.65                  | 0.72 |
| HNR3015-180M | 18 $\pm$ 20%  | 0.559         | 0.430 | 23                      | 0.56                 | 0.72 | 0.59                  | 0.72 |
| HNR3015-220M | 22 $\pm$ 20%  | 0.598         | 0.460 | 23                      | 0.52                 | 0.68 | 0.57                  | 0.69 |
| HNR3015-270M | 27 $\pm$ 20%  | 0.949         | 0.730 | 22                      | 0.48                 | 0.56 | 0.45                  | 0.56 |
| HNR3015-330M | 33 $\pm$ 20%  | 1.066         | 0.820 | 20                      | 0.44                 | 0.53 | 0.43                  | 0.51 |
| HNR3015-390M | 39 $\pm$ 20%  | 1.294         | 0.995 | 14                      | 0.41                 | 0.55 | 0.39                  | 0.44 |
| HNR3015-430M | 43 $\pm$ 20%  | 1.378         | 1.060 | 16                      | 0.37                 | 0.43 | 0.37                  | 0.48 |
| HNR3015-470M | 47 $\pm$ 20%  | 1.625         | 1.250 | 14                      | 0.35                 | 0.43 | 0.35                  | 0.44 |
| HNR3015-560M | 56 $\pm$ 20%  | 1.664         | 1.280 | 13                      | 0.33                 | 0.42 | 0.34                  | 0.41 |
| HNR3015-620M | 62 $\pm$ 20%  | 2.093         | 1.610 | 13                      | 0.30                 | 0.40 | 0.30                  | 0.41 |
| HNR3015-680M | 68 $\pm$ 20%  | 3.510         | 2.700 | 11                      | 0.28                 | 0.37 | 0.23                  | 0.31 |
| HNR3015-101M | 100 $\pm$ 20% | 4.043         | 3.110 | 6.3                     | 0.23                 | 0.25 | 0.21                  | 0.25 |
| HNR3015-151M | 150 $\pm$ 20% | 4.940         | 3.800 | 4.7                     | 0.18                 | 0.22 | 0.19                  | 0.23 |

## I SPECIFICATIONS

## HNR3021S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR3021-1RON | 1.0 $\pm$ 30% | 0.056         | 0.043 | 135                     | 4.00                 | 6.00 | 2.00                  | 2.30 |
| HNR3021-1R2N | 1.2 $\pm$ 30% | 0.060         | 0.047 | 99                      | 3.80                 | 4.10 | 1.95                  | 2.25 |
| HNR3021-1R5N | 1.5 $\pm$ 30% | 0.061         | 0.047 | 90                      | 3.90                 | 4.20 | 2.00                  | 2.20 |
| HNR3021-2R2N | 2.2 $\pm$ 30% | 0.091         | 0.070 | 75                      | 3.20                 | 3.70 | 1.85                  | 2.00 |
| HNR3021-3R3M | 3.3 $\pm$ 20% | 0.120         | 0.092 | 61                      | 2.70                 | 3.00 | 1.50                  | 1.68 |
| HNR3021-4R7M | 4.7 $\pm$ 20% | 0.156         | 0.120 | 44                      | 2.20                 | 2.70 | 1.20                  | 1.35 |
| HNR3021-6R8M | 6.8 $\pm$ 20% | 0.208         | 0.160 | 35                      | 2.00                 | 2.40 | 1.00                  | 1.20 |
| HNR3021-100M | 10 $\pm$ 20%  | 0.312         | 0.240 | 37                      | 1.40                 | 1.80 | 0.93                  | 1.10 |
| HNR3021-220M | 22 $\pm$ 20%  | 0.689         | 0.530 | 21                      | 1.00                 | 1.20 | 0.55                  | 0.61 |
| HNR3021-470M | 47 $\pm$ 20%  | 1.300         | 1.000 | 13                      | 0.70                 | 0.88 | 0.40                  | 0.45 |
| HNR3021-151M | 150 $\pm$ 20% | 5.200         | 4.000 | 4                       | 0.40                 | 0.49 | 0.16                  | 0.18 |

## HNR4010S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4010-1RON | 1.0 $\pm$ 30% | 0.067         | 0.056 | 116                     | 2.00                 | 2.30 | 1.90                  | 2.40 |
| HNR4010-1R5N | 1.5 $\pm$ 30% | 0.084         | 0.070 | 94                      | 1.68                 | 2.00 | 1.70                  | 2.00 |
| HNR4010-2R2M | 2.2 $\pm$ 30% | 0.102         | 0.085 | 73                      | 1.20                 | 1.50 | 1.50                  | 2.00 |
| HNR4010-3R3M | 3.3 $\pm$ 20% | 0.120         | 0.100 | 58                      | 1.10                 | 1.40 | 1.40                  | 1.80 |
| HNR4010-4R7M | 4.7 $\pm$ 20% | 0.168         | 0.140 | 47                      | 0.95                 | 1.10 | 1.20                  | 1.50 |
| HNR4010-6R8M | 6.8 $\pm$ 20% | 0.240         | 0.200 | 38                      | 0.80                 | 0.95 | 1.00                  | 1.20 |
| HNR4010-100M | 10 $\pm$ 20%  | 0.360         | 0.300 | 31                      | 0.62                 | 0.75 | 0.75                  | 1.00 |
| HNR4010-150M | 15 $\pm$ 20%  | 0.516         | 0.430 | 24                      | 0.54                 | 0.61 | 0.60                  | 0.85 |
| HNR4010-220M | 22 $\pm$ 20%  | 0.684         | 0.570 | 19                      | 0.45                 | 0.52 | 0.50                  | 0.75 |

## HNR4012S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4012-R82N | 0.82 $\pm$ 30% | 0.065         | 0.050 | 150                     | 3.02                 | 3.30 | 1.65                  | 2.50 |
| HNR4012-1RON | 1.0 $\pm$ 30%  | 0.065         | 0.050 | 120                     | 2.61                 | 3.20 | 1.65                  | 2.50 |
| HNR4012-1R5N | 1.5 $\pm$ 30%  | 0.085         | 0.065 | 90                      | 2.10                 | 2.70 | 1.46                  | 2.20 |
| HNR4012-1R8N | 1.8 $\pm$ 30%  | 0.104         | 0.080 | 88                      | 2.12                 | 2.60 | 1.32                  | 1.90 |
| HNR4012-2R2N | 2.2 $\pm$ 30%  | 0.104         | 0.080 | 74                      | 1.76                 | 2.30 | 1.32                  | 1.90 |
| HNR4012-2R7N | 2.7 $\pm$ 30%  | 0.117         | 0.090 | 71                      | 1.90                 | 2.30 | 1.25                  | 1.70 |
| HNR4012-3R3N | 3.3 $\pm$ 30%  | 0.143         | 0.110 | 60                      | 1.72                 | 2.10 | 1.12                  | 1.60 |
| HNR4012-3R6N | 3.6 $\pm$ 30%  | 0.143         | 0.110 | 57                      | 1.20                 | 1.70 | 1.12                  | 1.60 |

## I SPECIFICATIONS

## HNR4012S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Currents |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                 | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                    |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                 |      |
| HNR4012-4R3N | 4.3 $\pm$ 30% | 0.182         | 0.140 | 54                      | 1.58                 | 1.70 | 1.00                 | 1.50 |
| HNR4012-4R7N | 4.7 $\pm$ 30% | 0.163         | 0.125 | 50                      | 1.15                 | 1.80 | 1.05                 | 1.50 |
| HNR4012-5R1N | 5.1 $\pm$ 30% | 0.201         | 0.155 | 50                      | 1.55                 | 1.60 | 0.95                 | 1.50 |
| HNR4012-5R6N | 5.6 $\pm$ 30% | 0.182         | 0.140 | 42                      | 1.00                 | 1.60 | 1.00                 | 1.20 |
| HNR4012-6R8M | 6.8 $\pm$ 20% | 0.257         | 0.198 | 40                      | 0.85                 | 1.40 | 0.84                 | 1.20 |
| HNR4012-100M | 10 $\pm$ 20%  | 0.345         | 0.265 | 33                      | 0.80                 | 1.10 | 0.77                 | 1.00 |
| HNR4012-120M | 12 $\pm$ 20%  | 0.377         | 0.290 | 32                      | 0.66                 | 1.00 | 0.70                 | 0.95 |
| HNR4012-150M | 15 $\pm$ 20%  | 0.442         | 0.340 | 25                      | 0.56                 | 0.80 | 0.64                 | 0.85 |
| HNR4012-180M | 18 $\pm$ 20%  | 0.611         | 0.470 | 23                      | 0.55                 | 0.75 | 0.55                 | 0.80 |
| HNR4012-220M | 22 $\pm$ 20%  | 0.763         | 0.587 | 20                      | 0.46                 | 0.70 | 0.49                 | 0.75 |
| HNR4012-270M | 27 $\pm$ 20%  | 0.936         | 0.720 | 18                      | 0.50                 | 0.70 | 0.45                 | 0.60 |
| HNR4012-330M | 33 $\pm$ 20%  | 1.053         | 0.810 | 17                      | 0.42                 | 0.60 | 0.42                 | 0.58 |
| HNR4012-360M | 36 $\pm$ 20%  | 1.170         | 0.900 | 14                      | 0.40                 | 0.50 | 0.40                 | 0.56 |
| HNR4012-390M | 39 $\pm$ 20%  | 1.430         | 1.100 | 16                      | 0.55                 | 0.66 | 0.37                 | 0.50 |
| HNR4012-470M | 47 $\pm$ 20%  | 1.430         | 1.100 | 12                      | 0.35                 | 0.50 | 0.37                 | 0.50 |
| HNR4012-560M | 56 $\pm$ 20%  | 1.625         | 1.250 | 11                      | 0.33                 | 0.45 | 0.33                 | 0.46 |
| HNR4012-680M | 68 $\pm$ 20%  | 2.535         | 1.950 | 11                      | 0.38                 | 0.45 | 0.27                 | 0.45 |
| HNR4012-820M | 82 $\pm$ 20%  | 2.782         | 2.140 | 11                      | 0.28                 | 0.40 | 0.26                 | 0.36 |
| HNR4012-101M | 100 $\pm$ 20% | 2.873         | 2.210 | 9.4                     | 0.25                 | 0.30 | 0.25                 | 0.35 |

## HNR4015S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4015-1R0N | 1.0 $\pm$ 30% | 0.046         | 0.035 | 108                     | 3.30                 | 4.40 | 2.50                  | 2.80 |
| HNR4015-1R5N | 1.5 $\pm$ 30% | 0.052         | 0.040 | 81                      | 2.70                 | 3.50 | 2.20                  | 2.50 |
| HNR4015-2R2M | 2.2 $\pm$ 20% | 0.069         | 0.053 | 67                      | 2.10                 | 3.00 | 2.00                  | 2.20 |
| HNR4015-3R3M | 3.3 $\pm$ 20% | 0.098         | 0.075 | 54                      | 1.90                 | 2.60 | 1.80                  | 2.00 |
| HNR4015-4R7M | 4.7 $\pm$ 20% | 0.130         | 0.100 | 45                      | 1.45                 | 2.10 | 1.35                  | 1.50 |
| HNR4015-6R8M | 6.8 $\pm$ 20% | 0.176         | 0.135 | 36                      | 1.30                 | 1.60 | 1.20                  | 1.35 |
| HNR4015-100M | 10 $\pm$ 20%  | 0.260         | 0.200 | 30                      | 1.10                 | 1.36 | 1.00                  | 1.12 |
| HNR4015-150M | 15 $\pm$ 20%  | 0.390         | 0.300 | 23                      | 0.90                 | 1.10 | 0.85                  | 0.96 |
| HNR4015-220M | 22 $\pm$ 20%  | 0.520         | 0.400 | 18                      | 0.72                 | 0.90 | 0.68                  | 0.76 |
| HNR4015-330M | 33 $\pm$ 20%  | 0.858         | 0.660 | 14                      | 0.63                 | 0.76 | 0.58                  | 0.65 |
| HNR4015-470M | 47 $\pm$ 20%  | 1.270         | 0.975 | 11                      | 0.55                 | 0.63 | 0.45                  | 0.50 |
| HNR4015-680M | 68 $\pm$ 20%  | 2.080         | 1.600 | 10                      | 0.50                 | 0.58 | 0.42                  | 0.47 |

## I SPECIFICATIONS

## HNR4018S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4018-R47N | 0.47 $\pm$ 30% | 0.018         | 0.014 | 155                     | 4.30                 | 5.20 | 4.00                  | 4.50 |
| HNR4018-R68N | 0.68 $\pm$ 30% | 0.026         | 0.020 | 128                     | 4.90                 | 5.60 | 3.30                  | 3.80 |
| HNR4018-1R0N | 1.0 $\pm$ 30%  | 0.033         | 0.025 | 80                      | 4.80                 | 5.20 | 2.00                  | 3.30 |

|              |         |       |       |     |      |      |      |      |
|--------------|---------|-------|-------|-----|------|------|------|------|
| HNR4018-1R5N | 1.5±30% | 0.039 | 0.030 | 65  | 3.35 | 4.00 | 1.80 | 3.20 |
| HNR4018-1R8N | 1.8±30% | 0.044 | 0.034 | 54  | 3.00 | 3.40 | 2.00 | 2.80 |
| HNR4018-2R2M | 2.2±20% | 0.059 | 0.045 | 52  | 2.70 | 3.20 | 1.65 | 2.60 |
| HNR4018-3R3M | 3.3±20% | 0.091 | 0.070 | 44  | 2.45 | 2.90 | 1.23 | 2.10 |
| HNR4018-4R7M | 4.7±20% | 0.117 | 0.090 | 34  | 1.70 | 2.20 | 1.20 | 1.80 |
| HNR4018-6R8M | 6.8±20% | 0.143 | 0.110 | 29  | 1.45 | 2.00 | 1.06 | 1.50 |
| HNR4018-100M | 10±20%  | 0.234 | 0.180 | 24  | 1.30 | 1.60 | 0.84 | 1.20 |
| HNR4018-150M | 15±20%  | 0.325 | 0.250 | 19  | 0.94 | 1.10 | 0.65 | 1.00 |
| HNR4018-220M | 22±20%  | 0.468 | 0.360 | 16  | 0.80 | 0.88 | 0.59 | 0.85 |
| HNR4018-270M | 27±20%  | 0.611 | 0.470 | 27  | 0.47 | 0.62 | 0.52 | 0.90 |
| HNR4018-330M | 33±20%  | 0.689 | 0.530 | 12  | 0.56 | 0.75 | 0.49 | 0.72 |
| HNR4018-470M | 47±20%  | 0.845 | 0.650 | 10  | 0.57 | 0.70 | 0.42 | 0.65 |
| HNR4018-680M | 68±20%  | 1.300 | 1.000 | 8.3 | 0.47 | 0.51 | 0.32 | 0.52 |
| HNR4018-101M | 100±20% | 2.275 | 1.750 | 6.5 | 0.40 | 0.44 | 0.25 | 0.41 |
| HNR4018-151M | 150±20% | 3.250 | 2.500 | 5.5 | 0.31 | 0.34 | 0.22 | 0.36 |
| HNR4018-221M | 220±20% | 5.200 | 4.000 | 4   | 0.27 | 0.30 | 0.17 | 0.27 |

## HNR4020S Series

| Part Number  | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH         | Ω             |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L          | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4020-R24M | 0.24±20%   | 0.014         | 0.011 | 283                     | 10.5                 | 12.5 | 4.50                  | 5.20 |
| HNR4020-R33N | 0.33±30%   | 0.016         | 0.013 | 223                     | 7.50                 | 8.50 | 3.30                  | 4.90 |
| HNR4020-R47N | 0.47±30%   | 0.029         | 0.022 | 160                     | 7.00                 | 7.50 | 3.30                  | 3.70 |
| HNR4020-R68N | 0.68±30%   | 0.036         | 0.028 | 120                     | 6.40                 | 6.60 | 2.80                  | 3.30 |
| HNR4020-1R0N | 1.0±30%    | 0.038         | 0.029 | 75                      | 4.78                 | 5.20 | 2.15                  | 3.20 |
| HNR4020-1R2N | 1.2±30%    | 0.038         | 0.029 | 72                      | 5.10                 | 5.60 | 2.15                  | 3.20 |
| HNR4020-1R5N | 1.5±30%    | 0.046         | 0.035 | 71                      | 4.45                 | 4.90 | 1.98                  | 3.00 |
| HNR4020-2R2N | 2.2±30%    | 0.052         | 0.040 | 49                      | 3.40                 | 3.70 | 1.85                  | 2.80 |
| HNR4020-3R3M | 3.3±20%    | 0.091         | 0.070 | 44                      | 3.20                 | 3.50 | 1.40                  | 2.50 |
| HNR4020-3R6M | 3.6±20%    | 0.072         | 0.055 | 49                      | 2.80                 | 3.00 | 1.54                  | 2.50 |
| HNR4020-4R7M | 4.7±20%    | 0.098         | 0.075 | 42                      | 2.35                 | 2.50 | 1.34                  | 2.00 |
| HNR4020-5R1M | 5.1±20%    | 0.111         | 0.085 | 42                      | 2.30                 | 2.50 | 1.27                  | 1.80 |
| HNR4020-5R6M | 5.6±20%    | 0.117         | 0.090 | 30                      | 2.20                 | 2.40 | 1.22                  | 1.80 |
| HNR4020-6R2M | 6.2±20%    | 0.150         | 0.115 | 36                      | 2.15                 | 2.30 | 1.08                  | 1.60 |
| HNR4020-6R8M | 6.8±20%    | 0.163         | 0.125 | 33                      | 2.20                 | 2.40 | 1.04                  | 1.60 |
| HNR4020-7R5M | 7.5±20%    | 0.150         | 0.115 | 30                      | 1.85                 | 2.00 | 1.08                  | 1.50 |
| HNR4020-8R2M | 8.2±20%    | 0.163         | 0.125 | 27                      | 1.75                 | 1.90 | 1.04                  | 1.40 |
| HNR4020-100M | 10±20%     | 0.215         | 0.165 | 26                      | 1.60                 | 1.70 | 0.90                  | 1.20 |
| HNR4020-120M | 12±20%     | 0.228         | 0.175 | 26                      | 1.50                 | 1.60 | 0.88                  | 1.20 |
| HNR4020-150M | 15±20%     | 0.299         | 0.230 | 24                      | 1.35                 | 1.50 | 0.77                  | 1.10 |
| HNR4020-220M | 22±20%     | 0.455         | 0.350 | 15                      | 1.05                 | 1.10 | 0.62                  | 0.87 |
| HNR4020-270M | 27±20%     | 0.709         | 0.545 | 14                      | 1.02                 | 1.10 | 0.50                  | 0.70 |

## I SPECIFICATIONS

## HNR4020S Series

| Part Number  | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH         | Ω             |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L          | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4020-330M | 33±20%     | 0.715         | 0.550 | 11                      | 0.85                 | 0.93 | 0.49                  | 0.68 |
| HNR4020-390M | 39±20%     | 0.845         | 0.650 | 11                      | 0.82                 | 0.90 | 0.46                  | 0.64 |

|              |         |       |       |     |      |      |      |      |
|--------------|---------|-------|-------|-----|------|------|------|------|
| HNR4020-430M | 43±20%  | 0.858 | 0.660 | 10  | 0.77 | 0.85 | 0.45 | 0.63 |
| HNR4020-470M | 47±20%  | 0.923 | 0.710 | 10  | 0.74 | 0.81 | 0.44 | 0.61 |
| HNR4020-510M | 51±20%  | 0.975 | 0.750 | 10  | 0.70 | 0.77 | 0.42 | 0.59 |
| HNR4020-560M | 56±20%  | 1.040 | 0.800 | 10  | 0.66 | 0.72 | 0.41 | 0.57 |
| HNR4020-620M | 62±20%  | 1.170 | 0.900 | 9.6 | 0.65 | 0.71 | 0.39 | 0.52 |
| HNR4020-680M | 68±20%  | 1.380 | 1.060 | 7.7 | 0.61 | 0.67 | 0.36 | 0.50 |
| HNR4020-750M | 75±20%  | 1.510 | 1.160 | 7.7 | 0.70 | 0.77 | 0.35 | 0.49 |
| HNR4020-820M | 82±20%  | 1.520 | 1.170 | 7.2 | 0.50 | 0.55 | 0.34 | 0.47 |
| HNR4020-101M | 100±20% | 2.020 | 1.550 | 6.3 | 0.48 | 0.53 | 0.31 | 0.43 |

## HNR4026S Series

| Part Number  | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH         | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L          | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4026-1R0N | 1.0±30%    | 0.031         | 0.024 | 151                     | 3.30                 | 3.80 | 3.00                  | 3.30 |
| HNR4026-1R2N | 1.2±30%    | 0.039         | 0.030 | 120                     | 3.10                 | 3.40 | 2.30                  | 3.30 |
| HNR4026-1R5N | 1.5±30%    | 0.039         | 0.030 | 100                     | 2.40                 | 2.90 | 2.30                  | 3.10 |
| HNR4026-2R2M | 2.2±20%    | 0.052         | 0.040 | 96                      | 2.10                 | 2.40 | 2.00                  | 3.80 |
| HNR4026-3R3M | 3.3±20%    | 0.065         | 0.050 | 58                      | 1.80                 | 2.00 | 1.70                  | 2.50 |
| HNR4026-4R7M | 4.7±20%    | 0.072         | 0.055 | 46                      | 1.45                 | 1.70 | 1.60                  | 2.30 |
| HNR4026-6R8M | 6.8±20%    | 0.085         | 0.065 | 33                      | 1.30                 | 1.50 | 1.50                  | 2.00 |
| HNR4026-100M | 10±20%     | 0.110         | 0.085 | 26                      | 1.00                 | 1.20 | 1.30                  | 1.90 |
| HNR4026-150M | 15±20%     | 0.143         | 0.110 | 19                      | 0.90                 | 1.00 | 1.10                  | 1.50 |
| HNR4026-220M | 22±20%     | 0.214         | 0.165 | 13                      | 0.60                 | 0.80 | 0.90                  | 1.40 |
| HNR4026-330M | 33±20%     | 0.351         | 0.270 | 9                       | 0.55                 | 0.65 | 0.70                  | 1.00 |
| HNR4026-470M | 47±20%     | 0.390         | 0.300 | 6                       | 0.40                 | 0.55 | 0.65                  | 0.90 |

## HNR4030S Series

| Part Number  | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH         | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L          | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4030-R68N | 0.68±30%   | 0.013         | 0.010 | 130                     | 6.80                 | 8.00 | 4.56                  | 5.10 |
| HNR4030-R91N | 0.91±30%   | 0.017         | 0.013 | 100                     | 6.25                 | 6.80 | 4.15                  | 4.70 |
| HNR4030-1R0N | 1.0±30%    | 0.018         | 0.014 | 70                      | 5.26                 | 5.70 | 4.15                  | 4.70 |
| HNR4030-1R2N | 1.2±30%    | 0.020         | 0.015 | 80                      | 5.80                 | 6.30 | 3.82                  | 4.20 |
| HNR4030-1R5N | 1.5±30%    | 0.026         | 0.020 | 62                      | 4.84                 | 5.30 | 3.34                  | 3.60 |
| HNR4030-1R8N | 1.8±30%    | 0.033         | 0.025 | 60                      | 5.40                 | 5.80 | 3.20                  | 3.30 |
| HNR4030-2R2N | 2.2±30%    | 0.039         | 0.030 | 52                      | 4.50                 | 5.00 | 2.95                  | 3.20 |
| HNR4030-3R3M | 3.3±20%    | 0.052         | 0.040 | 38                      | 3.30                 | 3.60 | 2.40                  | 2.60 |
| HNR4030-3R6M | 3.6±20%    | 0.052         | 0.040 | 37                      | 3.00                 | 3.50 | 2.40                  | 2.60 |
| HNR4030-3R9M | 3.9±20%    | 0.074         | 0.057 | 32                      | 3.00                 | 3.30 | 2.10                  | 2.30 |

## SPECIFICATIONS

## HNR4030S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR4030-4R3M | 4.3 $\pm$ 20% | 0.072         | 0.055 | 37                      | 2.95                 | 3.20 | 2.10                  | 2.30 |
| HNR4030-4R7M | 4.7 $\pm$ 20% | 0.078         | 0.060 | 31                      | 2.90                 | 3.20 | 2.00                  | 2.30 |
| HNR4030-5R6M | 5.6 $\pm$ 20% | 0.085         | 0.065 | 30                      | 2.60                 | 2.80 | 1.95                  | 2.10 |
| HNR4030-6R8M | 6.8 $\pm$ 20% | 0.117         | 0.090 | 24                      | 2.75                 | 3.00 | 1.60                  | 1.70 |
| HNR4030-7R5M | 7.5 $\pm$ 20% | 0.110         | 0.085 | 26                      | 2.20                 | 2.40 | 1.65                  | 1.80 |
| HNR4030-8R2M | 8.2 $\pm$ 20% | 0.117         | 0.090 | 26                      | 2.10                 | 2.30 | 1.60                  | 1.70 |
| HNR4030-100M | 10 $\pm$ 20%  | 0.130         | 0.100 | 21                      | 1.95                 | 2.40 | 1.50                  | 1.60 |
| HNR4030-120M | 12 $\pm$ 20%  | 0.175         | 0.135 | 18                      | 1.70                 | 1.80 | 1.30                  | 1.40 |
| HNR4030-150M | 15 $\pm$ 20%  | 0.247         | 0.190 | 16                      | 1.65                 | 1.80 | 1.11                  | 1.20 |
| HNR4030-180M | 18 $\pm$ 20%  | 0.260         | 0.200 | 10                      | 1.40                 | 1.50 | 1.10                  | 1.20 |
| HNR4030-220M | 22 $\pm$ 20%  | 0.292         | 0.225 | 10                      | 1.30                 | 1.40 | 1.00                  | 1.20 |
| HNR4030-270M | 27 $\pm$ 20%  | 0.338         | 0.260 | 10                      | 1.15                 | 1.35 | 0.90                  | 1.05 |
| HNR4030-330M | 33 $\pm$ 20%  | 0.429         | 0.330 | 10                      | 1.10                 | 1.20 | 0.84                  | 0.92 |
| HNR4030-360M | 36 $\pm$ 20%  | 0.436         | 0.335 | 9.8                     | 1.05                 | 1.10 | 0.83                  | 0.91 |
| HNR4030-390M | 39 $\pm$ 20%  | 0.566         | 0.435 | 10                      | 1.03                 | 1.10 | 0.73                  | 0.80 |
| HNR4030-470M | 47 $\pm$ 20%  | 0.579         | 0.445 | 8.4                     | 0.95                 | 1.00 | 0.72                  | 0.80 |
| HNR4030-510M | 51 $\pm$ 20%  | 0.611         | 0.470 | 8.4                     | 0.90                 | 1.13 | 0.70                  | 0.80 |
| HNR4030-560M | 56 $\pm$ 20%  | 0.722         | 0.555 | 8.4                     | 0.85                 | 0.94 | 0.65                  | 0.71 |
| HNR4030-620M | 62 $\pm$ 20%  | 0.761         | 0.585 | 7                       | 0.80                 | 0.99 | 0.63                  | 0.70 |
| HNR4030-680M | 68 $\pm$ 20%  | 1.128         | 0.868 | 7                       | 0.72                 | 0.80 | 0.52                  | 0.57 |
| HNR4030-750M | 75 $\pm$ 20%  | 1.326         | 1.020 | 6.3                     | 0.70                 | 0.88 | 0.48                  | 0.53 |
| HNR4030-820M | 82 $\pm$ 20%  | 1.378         | 1.060 | 5.6                     | 0.66                 | 0.72 | 0.47                  | 0.52 |
| HNR4030-910M | 91 $\pm$ 20%  | 1.430         | 1.100 | 5.6                     | 0.65                 | 0.71 | 0.46                  | 0.50 |
| HNR4030-101M | 100 $\pm$ 20% | 1.495         | 1.150 | 5.6                     | 0.60                 | 0.73 | 0.45                  | 0.49 |
| HNR4030-121M | 120 $\pm$ 20% | 1.755         | 1.350 | 5.4                     | 0.55                 | 0.60 | 0.42                  | 0.46 |
| HNR4030-151M | 150 $\pm$ 20% | 2.340         | 1.800 | 4                       | 0.50                 | 0.55 | 0.30                  | 0.35 |
| HNR4030-221M | 220 $\pm$ 20% | 3.250         | 2.500 | 4.2                     | 0.40                 | 0.50 | 0.35                  | 0.40 |
| HNR4030-331M | 330 $\pm$ 20% | 5.200         | 4.000 | 6.8                     | 0.30                 | 0.40 | 0.25                  | 0.26 |
| HNR4030-471K | 470 $\pm$ 10% | 9.360         | 7.200 | 2                       | 0.30                 | 0.35 | 0.20                  | 0.23 |
| HNR4030-501M | 500 $\pm$ 20% | 9.027         | 6.944 | 2                       | 0.28                 | 0.30 | 0.15                  | 0.20 |
| HNR4030-681M | 680 $\pm$ 20% | 9.854         | 7.580 | 1.2                     | 0.19                 | 0.20 | 0.14                  | 0.18 |

## HNR5012S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR5012-R22N | 0.22 $\pm$ 30% | 0.034         | 0.028 | 315                     | 8.10                 | 9.30 | 3.00                  | 3.30 |
| HNR5012-1R0N | 1.0 $\pm$ 30%  | 0.068         | 0.057 | 103                     | 4.40                 | 4.70 | 2.00                  | 2.40 |
| HNR5012-1R5N | 1.5 $\pm$ 30%  | 0.086         | 0.072 | 68                      | 3.70                 | 3.80 | 1.90                  | 2.20 |
| HNR5012-2R2N | 2.2 $\pm$ 30%  | 0.108         | 0.090 | 50                      | 3.10                 | 3.20 | 1.70                  | 2.00 |
| HNR5012-3R3N | 3.3 $\pm$ 30%  | 0.151         | 0.126 | 34                      | 2.40                 | 2.60 | 1.40                  | 1.70 |
| HNR5012-4R7N | 4.7 $\pm$ 30%  | 0.197         | 0.164 | 31                      | 2.20                 | 2.30 | 1.30                  | 1.50 |
| HNR5012-6R8M | 6.8 $\pm$ 20%  | 0.294         | 0.245 | 22                      | 1.70                 | 1.90 | 1.00                  | 1.20 |
| HNR5012-100M | 10 $\pm$ 20%   | 0.413         | 0.344 | 17                      | 1.40                 | 1.50 | 0.85                  | 1.00 |
| HNR5012-150M | 15 $\pm$ 20%   | 0.523         | 0.436 | 13                      | 1.20                 | 1.30 | 0.80                  | 0.92 |
| HNR5012-220M | 22 $\pm$ 20%   | 0.858         | 0.780 | 16                      | 0.88                 | 0.98 | 0.60                  | 0.68 |

## I SPECIFICATIONS

## HNR5015S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR5015-R22N | 0.22 $\pm$ 30% | 0.026         | 0.020 | 284                     | 7.60                 | 9.60 | 3.50                  | 4.00 |
| HNR5015-R68N | 0.68 $\pm$ 30% | 0.036         | 0.028 | 108                     | 6.00                 | 6.60 | 2.90                  | 3.20 |
| HNR5015-1RON | 1.0 $\pm$ 30%  | 0.046         | 0.035 | 93                      | 4.50                 | 5.00 | 2.80                  | 3.10 |
| HNR5015-1R5N | 1.5 $\pm$ 30%  | 0.065         | 0.050 | 62                      | 3.50                 | 4.60 | 2.50                  | 2.80 |
| HNR5015-2R2N | 2.2 $\pm$ 30%  | 0.085         | 0.065 | 45                      | 3.00                 | 3.80 | 2.20                  | 2.50 |
| HNR5015-3R3N | 3.3 $\pm$ 30%  | 0.104         | 0.080 | 31                      | 2.50                 | 3.00 | 1.90                  | 2.10 |
| HNR5015-4R7N | 4.7 $\pm$ 30%  | 0.130         | 0.100 | 28                      | 2.10                 | 2.80 | 1.60                  | 1.80 |
| HNR5015-6R8M | 6.8 $\pm$ 20%  | 0.195         | 0.150 | 20                      | 1.65                 | 2.10 | 1.40                  | 1.60 |
| HNR5015-100M | 10 $\pm$ 20%   | 0.260         | 0.200 | 15                      | 1.45                 | 1.60 | 1.20                  | 1.35 |
| HNR5015-150M | 15 $\pm$ 20%   | 0.416         | 0.320 | 12                      | 1.20                 | 1.20 | 0.85                  | 0.96 |
| HNR5015-220M | 22 $\pm$ 20%   | 0.585         | 0.450 | 15                      | 1.00                 | 1.20 | 0.75                  | 0.85 |
| HNR5015-330M | 33 $\pm$ 20%   | 1.010         | 0.780 | 9                       | 0.95                 | 1.10 | 0.58                  | 0.65 |
| HNR5015-470M | 47 $\pm$ 20%   | 1.560         | 1.200 | 6                       | 0.88                 | 0.95 | 0.40                  | 0.45 |
| HNR5015-680M | 68 $\pm$ 20%   | 2.470         | 1.900 | 5                       | 0.72                 | 0.80 | 0.35                  | 0.39 |

## HNR5020S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |       | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|-------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ.  | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |       | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |       | Irms                  |      |
| HNR5020-R22N | 0.22 $\pm$ 30% | 0.011         | 0.009 | 280                     | 9.00                 | 12.00 | 5.30                  | 6.00 |
| HNR5020-R24N | 0.24 $\pm$ 30% | 0.011         | 0.009 | 248                     | 8.00                 | 10.00 | 5.30                  | 6.00 |
| HNR5020-R47N | 0.47 $\pm$ 30% | 0.017         | 0.013 | 160                     | 6.15                 | 6.70  | 4.60                  | 5.00 |
| HNR5020-R56N | 0.56 $\pm$ 30% | 0.022         | 0.017 | 137                     | 8.50                 | 9.60  | 3.80                  | 4.20 |
| HNR5020-R68N | 0.68 $\pm$ 30% | 0.022         | 0.017 | 120                     | 5.50                 | 6.00  | 4.00                  | 4.40 |
| HNR5020-R75N | 0.75 $\pm$ 30% | 0.022         | 0.017 | 117                     | 5.50                 | 6.00  | 4.00                  | 4.40 |
| HNR5020-1RON | 1.0 $\pm$ 30%  | 0.026         | 0.020 | 114                     | 4.10                 | 5.00  | 3.80                  | 4.10 |
| HNR5020-1R2N | 1.2 $\pm$ 30%  | 0.029         | 0.022 | 83                      | 4.50                 | 4.90  | 3.55                  | 3.90 |
| HNR5020-1R5N | 1.5 $\pm$ 30%  | 0.034         | 0.026 | 68                      | 4.10                 | 4.50  | 3.20                  | 3.50 |
| HNR5020-2R2N | 2.2 $\pm$ 30%  | 0.042         | 0.032 | 57                      | 3.20                 | 4.00  | 2.90                  | 3.10 |
| HNR5020-2R7N | 2.7 $\pm$ 30%  | 0.049         | 0.038 | 52                      | 2.90                 | 3.50  | 2.70                  | 2.90 |
| HNR5020-3RON | 3.0 $\pm$ 30%  | 0.049         | 0.038 | 49                      | 2.55                 | 2.80  | 2.70                  | 2.90 |
| HNR5020-3R3N | 3.3 $\pm$ 30%  | 0.056         | 0.043 | 46                      | 2.55                 | 3.00  | 2.50                  | 2.70 |
| HNR5020-3R6N | 3.6 $\pm$ 30%  | 0.056         | 0.043 | 43                      | 2.80                 | 3.00  | 2.50                  | 2.70 |
| HNR5020-3R9N | 3.9 $\pm$ 30%  | 0.056         | 0.043 | 40                      | 2.30                 | 2.80  | 2.50                  | 2.70 |
| HNR5020-4R3M | 4.3 $\pm$ 20%  | 0.074         | 0.057 | 37                      | 2.50                 | 3.00  | 2.20                  | 2.40 |
| HNR5020-4R7M | 4.7 $\pm$ 20%  | 0.074         | 0.064 | 37                      | 2.50                 | 2.70  | 2.20                  | 2.40 |
| HNR5020-5R1M | 5.1 $\pm$ 20%  | 0.083         | 0.064 | 32                      | 2.25                 | 2.60  | 2.05                  | 2.20 |
| HNR5020-5R6M | 5.6 $\pm$ 20%  | 0.083         | 0.064 | 32                      | 2.30                 | 2.50  | 2.05                  | 2.20 |
| HNR5020-6R8M | 6.8 $\pm$ 20%  | 0.108         | 0.083 | 30                      | 2.05                 | 2.20  | 1.80                  | 1.90 |

## I SPECIFICATIONS

## HNR5020S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR5020-7R5M | 7.5 $\pm$ 20% | 0.117         | 0.090 | 26                      | 1.85                 | 2.00 | 1.75                  | 1.90 |
| HNR5020-8R2M | 8.2 $\pm$ 20% | 0.127         | 0.098 | 26                      | 1.85                 | 2.00 | 1.65                  | 1.80 |
| HNR5020-9R1M | 9.1 $\pm$ 20% | 0.143         | 0.110 | 24                      | 1.70                 | 1.80 | 1.55                  | 1.70 |
| HNR5020-100M | 10 $\pm$ 20%  | 0.143         | 0.110 | 24                      | 1.70                 | 1.80 | 1.55                  | 1.70 |
| HNR5020-120M | 12 $\pm$ 20%  | 0.182         | 0.140 | 22                      | 1.50                 | 1.60 | 1.40                  | 1.50 |
| HNR5020-150M | 15 $\pm$ 20%  | 0.215         | 0.165 | 20                      | 1.35                 | 1.40 | 1.25                  | 1.30 |
| HNR5020-180M | 18 $\pm$ 20%  | 0.260         | 0.200 | 16                      | 1.25                 | 1.30 | 1.15                  | 1.20 |
| HNR5020-220M | 22 $\pm$ 20%  | 0.294         | 0.226 | 14                      | 1.15                 | 1.20 | 1.10                  | 1.20 |
| HNR5020-330M | 33 $\pm$ 20%  | 0.507         | 0.390 | 10                      | 0.92                 | 1.00 | 0.90                  | 0.99 |
| HNR5020-470M | 47 $\pm$ 20%  | 0.680         | 0.523 | 7                       | 0.77                 | 0.84 | 0.77                  | 0.84 |
| HNR5020-560M | 56 $\pm$ 20%  | 0.819         | 0.630 | 6                       | 0.77                 | 0.84 | 0.70                  | 0.77 |
| HNR5020-680M | 68 $\pm$ 20%  | 0.962         | 0.740 | 6                       | 0.65                 | 0.70 | 0.64                  | 0.70 |
| HNR5020-820M | 82 $\pm$ 20%  | 1.158         | 0.965 | 6                       | 0.65                 | 0.75 | 0.50                  | 0.60 |
| HNR5020-101M | 100 $\pm$ 20% | 1.430         | 1.100 | 6                       | 0.53                 | 0.58 | 0.53                  | 0.58 |
| HNR5020-121M | 120 $\pm$ 20% | 1.755         | 1.350 | 6                       | 0.42                 | 0.53 | 0.40                  | 0.50 |
| HNR5020-201M | 200 $\pm$ 20% | 2.600         | 2.000 | 4.5                     | 0.30                 | 0.33 | 0.40                  | 0.45 |

## HNR5030S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR5030-R47N | 0.47 $\pm$ 30% | 0.013         | 0.010 | 144                     | 9.00                 | 11.0 | 5.00                  | 5.60 |
| HNR5030-1R0N | 1.0 $\pm$ 30%  | 0.020         | 0.015 | 103                     | 6.65                 | 7.80 | 4.00                  | 4.50 |
| HNR5030-1R5N | 1.5 $\pm$ 30%  | 0.021         | 0.016 | 61                      | 4.80                 | 6.00 | 3.90                  | 4.36 |
| HNR5030-2R2M | 2.2 $\pm$ 20%  | 0.030         | 0.023 | 52                      | 4.20                 | 5.00 | 3.50                  | 3.95 |
| HNR5030-3R3M | 3.3 $\pm$ 20%  | 0.039         | 0.030 | 42                      | 3.60                 | 4.60 | 3.00                  | 3.40 |
| HNR5030-4R7M | 4.7 $\pm$ 20%  | 0.046         | 0.035 | 33                      | 3.10                 | 3.50 | 2.60                  | 2.90 |
| HNR5030-6R8M | 6.8 $\pm$ 20%  | 0.068         | 0.052 | 27                      | 2.50                 | 3.00 | 2.30                  | 2.60 |
| HNR5030-100M | 10 $\pm$ 20%   | 0.091         | 0.070 | 22                      | 1.90                 | 2.30 | 1.70                  | 1.90 |
| HNR5030-150M | 15 $\pm$ 20%   | 0.163         | 0.125 | 18                      | 1.60                 | 1.80 | 1.40                  | 1.60 |
| HNR5030-220M | 22 $\pm$ 20%   | 0.234         | 0.180 | 13                      | 1.40                 | 1.50 | 1.05                  | 1.20 |
| HNR5030-270M | 27 $\pm$ 20%   | 0.247         | 0.190 | 10                      | 1.30                 | 1.40 | 0.90                  | 1.00 |
| HNR5030-330M | 33 $\pm$ 20%   | 0.293         | 0.225 | 9                       | 1.15                 | 1.30 | 0.80                  | 0.90 |
| HNR5030-470M | 47 $\pm$ 20%   | 0.423         | 0.325 | 6                       | 0.95                 | 1.10 | 0.70                  | 0.78 |
| HNR5030-560M | 56 $\pm$ 20%   | 0.546         | 0.420 | 5                       | 0.89                 | 0.92 | 0.65                  | 0.70 |
| HNR5030-680M | 68 $\pm$ 20%   | 0.618         | 0.475 | 5                       | 0.85                 | 0.90 | 0.60                  | 0.76 |
| HNR5030-101M | 100 $\pm$ 20%  | 0.936         | 0.720 | 5                       | 0.58                 | 0.70 | 0.59                  | 0.75 |
| HNR5030-151M | 150 $\pm$ 20%  | 1.370         | 1.050 | 3                       | 0.56                 | 0.68 | 0.55                  | 0.60 |
| HNR5030-221M | 220 $\pm$ 20%  | 1.690         | 1.300 | 3                       | 0.50                 | 0.60 | 0.45                  | 0.51 |

## SPECIFICATIONS

## HNR5040S Series

| Part Number  | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |       | Heat Rating Current*4 |       |
|--------------|------------|---------------|-------|-------------------------|----------------------|-------|-----------------------|-------|
|              | 100kHz, 1V | Max.          | Typ.  | Min.                    | Max.                 | Typ.  | Max.                  | Typ.  |
| Units        | uH         | $\Omega$      |       | MHz                     | A                    |       | A                     |       |
| Symbol       | L          | DCR           |       | S. R. F                 | Isat                 |       | Irms                  |       |
| HNR5040-R22M | 0.22±20%   | 0.008         | 0.006 | 289                     | 18.00                | 20.00 | 6.50                  | 7.50  |
| HNR5040-R24N | 0.24±30%   | 0.008         | 0.006 | 251                     | 15.70                | 18.00 | 6.40                  | 7.40  |
| HNR5040-R47M | 0.47±20%   | 0.009         | 0.007 | 171                     | 10.00                | 11.50 | 6.60                  | 7.60  |
| HNR5040-1R0N | 1.0±30%    | 0.020         | 0.012 | 117                     | 7.35                 | 8.00  | 4.90                  | 5.00  |
| HNR5040-1R2N | 1.2±30%    | 0.021         | 0.016 | 110                     | 6.50                 | 7.00  | 4.15                  | 4.25  |
| HNR5040-1R5N | 1.5±30%    | 0.020         | 0.015 | 86                      | 6.30                 | 6.80  | 4.30                  | 4.85  |
| HNR5040-1R8M | 1.8±20%    | 0.021         | 0.016 | 55                      | 5.50                 | 6.05  | 4.15                  | 4.30  |
| HNR5040-2R2N | 2.2±30%    | 0.025         | 0.019 | 50                      | 4.90                 | 5.50  | 3.80                  | 4.20  |
| HNR5040-2R7N | 2.7±30%    | 0.029         | 0.022 | 37                      | 4.30                 | 4.80  | 3.60                  | 4.00  |
| HNR5040-3R0N | 3.0±30%    | 0.029         | 0.022 | 37                      | 4.15                 | 4.60  | 3.60                  | 4.00  |
| HNR5040-3R3N | 3.3±30%    | 0.031         | 0.024 | 32                      | 3.95                 | 4.45  | 3.40                  | 3.90  |
| HNR5040-3R6M | 3.6±20%    | 0.034         | 0.026 | 30                      | 3.80                 | 4.40  | 3.30                  | 3.70  |
| HNR5040-3R9N | 3.9±30%    | 0.035         | 0.027 | 29                      | 3.55                 | 4.00  | 3.20                  | 3.70  |
| HNR5040-4R7N | 4.7±30%    | 0.039         | 0.030 | 28                      | 3.50                 | 3.80  | 3.00                  | 3.30  |
| HNR5040-5R6M | 5.6±20%    | 0.046         | 0.035 | 27                      | 3.00                 | 3.70  | 2.80                  | 3.10  |
| HNR5040-6R8M | 6.8±20%    | 0.056         | 0.043 | 21                      | 2.90                 | 3.40  | 2.50                  | 2.80  |
| HNR5040-8R2M | 8.2±20%    | 0.062         | 0.048 | 20                      | 2.70                 | 2.90  | 2.30                  | 2.60  |
| HNR5040-100M | 10±20%     | 0.083         | 0.064 | 18                      | 2.35                 | 2.70  | 2.10                  | 2.35  |
| HNR5040-120M | 12±20%     | 0.100         | 0.077 | 14                      | 2.2                  | 2.5   | 2.0                   | 2.1   |
| HNR5040-150M | 15±20%     | 0.112         | 0.086 | 13                      | 2.00                 | 2.20  | 2.00                  | 2.05  |
| HNR5040-180M | 18±20%     | 0.155         | 0.119 | 12                      | 1.70                 | 2.00  | 1.45                  | 1.65  |
| HNR5040-220M | 22±20%     | 0.168         | 0.129 | 11                      | 1.60                 | 1.80  | 1.50                  | 1.60  |
| HNR5040-270M | 27±20%     | 0.244         | 0.188 | 9.8                     | 1.52                 | 1.75  | 1.10                  | 1.25  |
| HNR5040-330M | 33±20%     | 0.244         | 0.188 | 9                       | 1.30                 | 1.45  | 1.20                  | 1.35  |
| HNR5040-470M | 47±20%     | 0.354         | 0.272 | 7                       | 1.10                 | 1.20  | 1.00                  | 1.15  |
| HNR5040-510M | 51±20%     | 0.494         | 0.380 | 6                       | 1.00                 | 1.20  | 1.00                  | 1.10  |
| HNR5040-560M | 56±20%     | 0.494         | 0.380 | 6                       | 1.05                 | 1.20  | 0.80                  | 0.90  |
| HNR5040-680M | 68±20%     | 0.520         | 0.400 | 6                       | 0.90                 | 1.00  | 0.80                  | 0.90  |
| HNR5040-750M | 75±20%     | 0.585         | 0.450 | 6                       | 0.85                 | 0.95  | 0.72                  | 0.80  |
| HNR5040-101M | 100±20%    | 0.728         | 0.560 | 5                       | 0.75                 | 0.85  | 0.70                  | 0.78  |
| HNR5040-151M | 150±20%    | 0.975         | 0.750 | 3.7                     | 0.65                 | 0.67  | 0.60                  | 0.70  |
| HNR5040-221M | 220±20%    | 1.820         | 1.400 | 3.0                     | 0.48                 | 0.55  | 0.40                  | 0.50  |
| HNR5040-301M | 300±20%    | 2.600         | 2.000 | 2.7                     | 0.50                 | 0.58  | 0.35                  | 0.40  |
| HNR5040-331M | 330±20%    | 2.730         | 2.100 | 2.7                     | 0.42                 | 0.47  | 0.40                  | 0.50  |
| HNR5040-471M | 470±20%    | 3.900         | 3.000 | 2.7                     | 0.37                 | 0.43  | 0.35                  | 0.40  |
| HNR5040-561M | 560±20%    | 4.920         | 3.780 | 1.3                     | 0.31                 | 0.36  | 0.31                  | 0.35  |
| HNR5040-681M | 680±20%    | 5.070         | 3.900 | 1.3                     | 0.30                 | 0.35  | 0.25                  | 0.30  |
| HNR5040-102M | 1000±20%   | 7.800         | 6.000 | 1.3                     | 0.21                 | 0.25  | 0.20                  | 0.23  |
| HNR5040-332M | 3300±20%   | 25.20         | 21.00 | 0.9                     | 0.140                | 0.150 | 0.100                 | 0.120 |
| HNR5040-392M | 3900±20%   | 30.55         | 23.50 | 0.8                     | 0.125                | 0.150 | 0.100                 | 0.115 |
| HNR5040-472M | 4700±20%   | 45.50         | 35.00 | 0.6                     | 0.110                | 0.130 | 0.080                 | 0.100 |
| HNR5040-502M | 5000±20%   | 43.16         | 35.97 | 0.49                    | 0.110                | 0.130 | 0.085                 | 0.098 |
| HNR5040-562M | 5600±20%   | 50.70         | 39.00 | 0.49                    | 0.105                | 0.120 | 0.080                 | 0.092 |
| HNR5040-682M | 6800±20%   | 55.90         | 43.00 | 0.38                    | 0.090                | 0.110 | 0.075                 | 0.086 |
| HNR5040-822M | 8200±20%   | 55.90         | 43.00 | 0.38                    | 0.070                | 0.085 | 0.075                 | 0.086 |
| HNR5040-103M | 10000±20%  | 58.50         | 45.00 | 0.32                    | 0.065                | 0.075 | 0.075                 | 0.086 |

## I SPECIFICATIONS

## HNR5045S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR5045-2R2M | 2.2 $\pm$ 20% | 0.029         | 0.022 | 50                      | 6.40                 | 7.20 | 4.70                  | 5.40 |
| HNR5045-100M | 10 $\pm$ 20%  | 0.079         | 0.061 | 17                      | 3.20                 | 3.70 | 2.50                  | 2.90 |
| HNR5045-220M | 22 $\pm$ 20%  | 0.163         | 0.125 | 10                      | 2.00                 | 2.35 | 1.55                  | 1.80 |

## HNR6020S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR6020-R50N | 0.50 $\pm$ 30% | 0.018         | 0.014 | 120                     | 4.50                 | 6.00 | 4.00                  | 5.00 |
| HNR6020-R68N | 0.68 $\pm$ 30% | 0.022         | 0.017 | 115                     | 6.55                 | 7.80 | 3.80                  | 4.80 |
| HNR6020-R82N | 0.82 $\pm$ 30% | 0.022         | 0.017 | 110                     | 5.30                 | 6.30 | 3.80                  | 4.80 |
| HNR6020-1R0N | 1.0 $\pm$ 30%  | 0.020         | 0.020 | 100                     | 4.15                 | 5.00 | 3.50                  | 4.40 |
| HNR6020-1R2N | 1.2 $\pm$ 30%  | 0.029         | 0.022 | 88                      | 5.90                 | 7.00 | 3.20                  | 4.00 |
| HNR6020-1R5N | 1.5 $\pm$ 30%  | 0.029         | 0.022 | 79                      | 4.25                 | 5.10 | 3.20                  | 4.00 |
| HNR6020-1R8N | 1.8 $\pm$ 30%  | 0.036         | 0.028 | 68                      | 4.85                 | 5.80 | 2.75                  | 3.50 |
| HNR6020-2R0N | 2.0 $\pm$ 30%  | 0.046         | 0.035 | 65                      | 4.10                 | 4.90 | 2.60                  | 3.30 |
| HNR6020-2R2N | 2.2 $\pm$ 30%  | 0.036         | 0.028 | 61                      | 3.75                 | 4.50 | 2.75                  | 3.50 |
| HNR6020-2R7N | 2.7 $\pm$ 30%  | 0.046         | 0.035 | 56                      | 3.90                 | 4.60 | 2.60                  | 3.30 |
| HNR6020-3R3N | 3.3 $\pm$ 30%  | 0.046         | 0.035 | 51                      | 3.15                 | 3.70 | 2.60                  | 3.30 |
| HNR6020-3R9N | 3.9 $\pm$ 30%  | 0.064         | 0.049 | 45                      | 3.25                 | 3.90 | 2.10                  | 2.60 |
| HNR6020-4R3N | 4.3 $\pm$ 30%  | 0.064         | 0.049 | 44                      | 2.70                 | 3.20 | 2.10                  | 2.60 |
| HNR6020-4R7N | 4.7 $\pm$ 30%  | 0.075         | 0.058 | 41                      | 3.00                 | 3.60 | 2.00                  | 2.50 |
| HNR6020-5R6N | 5.6 $\pm$ 30%  | 0.075         | 0.058 | 36                      | 2.40                 | 2.90 | 1.90                  | 2.40 |
| HNR6020-6R2N | 6.2 $\pm$ 30%  | 0.103         | 0.079 | 31                      | 2.30                 | 2.70 | 1.80                  | 2.30 |
| HNR6020-6R8N | 6.8 $\pm$ 30%  | 0.103         | 0.079 | 31                      | 2.20                 | 2.60 | 1.80                  | 2.30 |
| HNR6020-8R2N | 8.2 $\pm$ 30%  | 0.137         | 0.105 | 27                      | 2.10                 | 2.50 | 1.40                  | 1.80 |
| HNR6020-100M | 10 $\pm$ 20%   | 0.137         | 0.105 | 27                      | 1.75                 | 2.10 | 1.40                  | 1.80 |
| HNR6020-120M | 12 $\pm$ 20%   | 0.156         | 0.120 | 25                      | 1.45                 | 1.70 | 1.30                  | 1.60 |
| HNR6020-150M | 15 $\pm$ 20%   | 0.189         | 0.145 | 21                      | 1.20                 | 1.40 | 1.20                  | 1.50 |
| HNR6020-180M | 18 $\pm$ 20%   | 0.234         | 0.180 | 18                      | 1.20                 | 1.40 | 1.08                  | 1.40 |
| HNR6020-220M | 22 $\pm$ 20%   | 0.265         | 0.204 | 16                      | 1.05                 | 1.20 | 1.00                  | 1.30 |
| HNR6020-330M | 33 $\pm$ 20%   | 0.390         | 0.300 | 11                      | 0.95                 | 1.10 | 0.84                  | 1.05 |
| HNR6020-470M | 47 $\pm$ 20%   | 0.559         | 0.430 | 10                      | 0.70                 | 0.90 | 0.80                  | 0.90 |
| HNR6020-331M | 330 $\pm$ 20%  | 3.419         | 2.630 | 3                       | 0.27                 | 0.33 | 0.33                  | 0.39 |

## HNR6028S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR6028-R82N | 0.82 $\pm$ 30% | 0.016         | 0.012 | 97                      | 6.50                 | 9.00 | 5.20                  | 6.00 |
| HNR6028-1R0N | 1.0 $\pm$ 30%  | 0.018         | 0.015 | 70                      | 5.75                 | 7.00 | 5.20                  | 5.70 |
| HNR6028-1R2N | 1.2 $\pm$ 30%  | 0.017         | 0.013 | 69                      | 6.40                 | 7.50 | 4.58                  | 5.00 |
| HNR6028-1R5N | 1.5 $\pm$ 30%  | 0.020         | 0.016 | 65                      | 6.00                 | 6.60 | 4.58                  | 5.00 |
| HNR6028-2R2N | 2.2 $\pm$ 30%  | 0.026         | 0.020 | 48                      | 5.10                 | 5.60 | 3.75                  | 4.10 |
| HNR6028-2R7N | 2.7 $\pm$ 30%  | 0.026         | 0.020 | 48                      | 3.80                 | 4.10 | 3.75                  | 4.10 |

## I SPECIFICATIONS

## HNR6028S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR6028-3R3N | 3.3 $\pm$ 30%  | 0.033         | 0.025 | 41                      | 4.15                 | 4.50 | 3.48                  | 3.80 |
| HNR6028-4R7N | 4.7 $\pm$ 30%  | 0.039         | 0.030 | 35                      | 3.00                 | 3.30 | 3.08                  | 3.40 |
| HNR6028-5R1N | 5.1 $\pm$ 30%  | 0.056         | 0.043 | 32                      | 3.20                 | 3.50 | 2.60                  | 2.80 |
| HNR6028-6R2M | 6.2 $\pm$ 20%  | 0.061         | 0.047 | 30                      | 3.05                 | 3.30 | 2.40                  | 2.60 |
| HNR6028-6R8M | 6.8 $\pm$ 20%  | 0.061         | 0.047 | 27                      | 2.60                 | 3.00 | 2.40                  | 2.60 |
| HNR6028-8R2M | 8.2 $\pm$ 20%  | 0.072         | 0.055 | 24                      | 2.30                 | 2.50 | 2.25                  | 2.50 |
| HNR6028-9R1M | 9.1 $\pm$ 20%  | 0.096         | 0.074 | 24                      | 2.55                 | 2.80 | 2.15                  | 2.40 |
| HNR6028-100M | 10 $\pm$ 20%   | 0.094         | 0.072 | 23                      | 2.04                 | 2.50 | 1.95                  | 2.40 |
| HNR6028-120M | 12 $\pm$ 20%   | 0.104         | 0.080 | 18                      | 1.80                 | 2.00 | 1.85                  | 2.00 |
| HNR6028-150M | 15 $\pm$ 20%   | 0.163         | 0.125 | 18                      | 1.75                 | 1.90 | 1.45                  | 1.60 |
| HNR6028-180M | 18 $\pm$ 20%   | 0.156         | 0.120 | 15                      | 1.52                 | 1.80 | 1.45                  | 1.60 |
| HNR6028-220M | 22 $\pm$ 20%   | 0.182         | 0.140 | 14                      | 1.45                 | 1.80 | 1.40                  | 1.60 |
| HNR6028-270M | 27 $\pm$ 20%   | 0.202         | 0.155 | 13                      | 1.50                 | 1.60 | 1.32                  | 1.40 |
| HNR6028-330M | 33 $\pm$ 20%   | 0.241         | 0.185 | 12                      | 1.35                 | 1.50 | 1.22                  | 1.30 |
| HNR6028-360M | 36 $\pm$ 20%   | 0.280         | 0.215 | 11                      | 1.25                 | 1.40 | 1.13                  | 1.20 |
| HNR6028-390M | 39 $\pm$ 20%   | 0.293         | 0.225 | 11                      | 1.25                 | 1.40 | 1.10                  | 1.20 |
| HNR6028-470M | 47 $\pm$ 20%   | 0.410         | 0.315 | 9.5                     | 1.15                 | 1.30 | 1.06                  | 1.10 |
| HNR6028-560M | 56 $\pm$ 20%   | 0.449         | 0.345 | 8.2                     | 1.05                 | 1.20 | 0.89                  | 1.00 |
| HNR6028-680M | 68 $\pm$ 20%   | 0.468         | 0.360 | 7.7                     | 0.80                 | 0.95 | 0.86                  | 0.95 |
| HNR6028-750M | 75 $\pm$ 20%   | 0.533         | 0.410 | 7.7                     | 0.90                 | 0.99 | 0.81                  | 0.90 |
| HNR6028-820M | 82 $\pm$ 20%   | 0.650         | 0.500 | 7.7                     | 0.80                 | 0.88 | 0.70                  | 0.77 |
| HNR6028-101M | 100 $\pm$ 20%  | 0.650         | 0.500 | 7.1                     | 0.65                 | 0.71 | 0.70                  | 0.77 |
| HNR6028-401M | 400 $\pm$ 20%  | 2.808         | 2.160 | 2.8                     | 0.30                 | 0.33 | 0.40                  | 0.45 |
| HNR6028-102M | 1000 $\pm$ 20% | 7.540         | 5.800 | 1.5                     | 0.18                 | 0.22 | 0.23                  | 0.26 |

## NHR6040S Series

| Part Number  | Inductance    | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|---------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V    | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH            | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L             | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR6040-1R0M | 1.0 $\pm$ 20% | 0.010         | 0.008 | 97                      | 7.85                 | 9.05 | 6.30                  | 7.20 |
| HNR6040-100M | 10 $\pm$ 20%  | 0.062         | 0.048 | 16                      | 3.20                 | 3.50 | 2.45                  | 2.80 |
| HNR6040-120M | 12 $\pm$ 20%  | 0.075         | 0.058 | 14                      | 2.80                 | 3.25 | 2.20                  | 2.55 |
| HNR6040-150M | 15 $\pm$ 20%  | 0.088         | 0.068 | 13                      | 2.50                 | 3.00 | 2.05                  | 2.35 |
| HNR6040-220M | 22 $\pm$ 20%  | 0.116         | 0.089 | 10                      | 2.05                 | 2.50 | 1.80                  | 2.05 |
| HNR6040-330M | 33 $\pm$ 20%  | 0.178         | 0.137 | 9.9                     | 1.65                 | 2.00 | 1.45                  | 1.65 |
| HNR6040-680M | 68 $\pm$ 20%  | 0.370         | 0.285 | 5.6                     | 1.15                 | 1.40 | 0.95                  | 1.10 |
| HNR6040-471M | 470 $\pm$ 20% | 2.500         | 1.790 | 2.0                     | 0.42                 | 0.50 | 0.47                  | 0.55 |

## I SPECIFICATIONS

## HNR6045S Series

| Part Number  | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |       | Heat Rating Current*4 |      |
|--------------|------------|---------------|-------|-------------------------|----------------------|-------|-----------------------|------|
|              | 100kHz, 1V | Max.          | Typ.  | Min.                    | Max.                 | Typ.  | Max.                  | Typ. |
| Units        | uH         | $\Omega$      |       | MHz                     | A                    |       | A                     |      |
| Symbol       | L          | DCR           |       | S. R. F                 | Isat                 |       | I <sub>rms</sub>      |      |
| HNR6045-R47N | 0.47±30%   | 0.008         | 0.006 | 155                     | 15.00                | 16.50 | 6.50                  | 6.60 |
| HNR6045-R56N | 0.56±30%   | 0.008         | 0.006 | 142                     | 14.00                | 15.00 | 6.50                  | 7.50 |
| HNR6045-R68N | 0.68±30%   | 0.012         | 0.006 | 99                      | 11.00                | 12.00 | 5.70                  | 6.50 |
| HNR6045-R82N | 0.82±30%   | 0.010         | 0.008 | 140                     | 10.35                | 11.00 | 5.90                  | 6.50 |
| HNR6045-1R0N | 1.0±30%    | 0.014         | 0.011 | 100                     | 9.85                 | 10.00 | 5.14                  | 5.60 |
| HNR6045-1R2N | 1.2±30%    | 0.013         | 0.010 | 100                     | 8.35                 | 9.10  | 5.40                  | 5.90 |
| HNR6045-1R3N | 1.3±30%    | 0.013         | 0.010 | 100                     | 8.35                 | 9.10  | 5.40                  | 5.90 |
| HNR6045-1R5N | 1.5±30%    | 0.016         | 0.012 | 65                      | 8.00                 | 9.70  | 4.95                  | 5.40 |
| HNR6045-1R8N | 1.8±30%    | 0.022         | 0.017 | 74                      | 7.60                 | 8.40  | 4.95                  | 5.40 |
| HNR6045-2R2N | 2.2±30%    | 0.025         | 0.019 | 52                      | 6.75                 | 7.40  | 4.60                  | 5.00 |
| HNR6045-2R3N | 2.3±30%    | 0.027         | 0.021 | 60                      | 6.00                 | 6.60  | 3.50                  | 3.80 |
| HNR6045-2R7N | 2.7±30%    | 0.020         | 0.015 | 38                      | 5.75                 | 6.30  | 4.30                  | 4.70 |
| HNR6045-3R0N | 3.0±30%    | 0.026         | 0.020 | 35                      | 5.60                 | 6.20  | 3.80                  | 4.20 |
| HNR6045-3R3N | 3.3±30%    | 0.027         | 0.021 | 32                      | 5.90                 | 6.20  | 3.70                  | 4.00 |
| HNR6045-3R6N | 3.6±30%    | 0.027         | 0.021 | 28                      | 5.25                 | 5.70  | 3.70                  | 4.00 |
| HNR6045-4R3M | 4.3±20%    | 0.030         | 0.023 | 23                      | 4.45                 | 4.90  | 3.50                  | 3.80 |
| HNR6045-4R5M | 4.5±20%    | 0.034         | 0.026 | 24                      | 4.97                 | 5.50  | 3.30                  | 3.60 |
| HNR6045-4R7M | 4.7±20%    | 0.034         | 0.026 | 24                      | 4.97                 | 5.50  | 3.30                  | 3.60 |
| HNR6045-5R1M | 5.1±20%    | 0.034         | 0.026 | 23                      | 4.40                 | 4.80  | 3.30                  | 3.60 |
| HNR6045-5R6M | 5.6±20%    | 0.038         | 0.029 | 23                      | 4.15                 | 4.60  | 3.15                  | 3.40 |
| HNR6045-6R2M | 6.2±20%    | 0.040         | 0.031 | 26                      | 4.43                 | 4.80  | 3.00                  | 3.30 |
| HNR6045-6R3M | 6.3±20%    | 0.040         | 0.031 | 26                      | 4.43                 | 4.70  | 3.00                  | 3.30 |
| HNR6045-6R8M | 6.8±20%    | 0.040         | 0.031 | 20                      | 3.90                 | 4.30  | 3.00                  | 3.30 |
| HNR6045-7R5M | 7.5±20%    | 0.044         | 0.034 | 18                      | 3.50                 | 3.80  | 2.90                  | 3.20 |
| HNR6045-8R2M | 8.2±20%    | 0.056         | 0.043 | 21                      | 3.90                 | 4.30  | 2.60                  | 2.80 |
| HNR6045-9R1M | 9.1±20%    | 0.056         | 0.043 | 17                      | 3.35                 | 3.70  | 2.60                  | 2.80 |
| HNR6045-100M | 10±20%     | 0.062         | 0.048 | 15                      | 3.20                 | 3.50  | 2.45                  | 2.70 |
| HNR6045-120M | 12±20%     | 0.075         | 0.058 | 13                      | 2.80                 | 3.00  | 2.20                  | 2.40 |
| HNR6045-150M | 15±20%     | 0.088         | 0.068 | 12                      | 2.50                 | 2.70  | 2.05                  | 2.20 |
| HNR6045-180M | 18±20%     | 0.105         | 0.081 | 10                      | 2.20                 | 2.40  | 1.85                  | 2.00 |
| HNR6045-220M | 22±20%     | 0.116         | 0.089 | 10                      | 2.05                 | 2.20  | 1.80                  | 2.00 |
| HNR6045-270M | 27±20%     | 0.133         | 0.102 | 9.2                     | 1.90                 | 2.10  | 1.65                  | 1.80 |
| HNR6045-300M | 30±20%     | 0.172         | 0.132 | 7.8                     | 1.70                 | 1.80  | 1.50                  | 1.60 |
| HNR6045-330M | 33±20%     | 0.178         | 0.137 | 7.8                     | 1.65                 | 1.80  | 1.45                  | 1.60 |
| HNR6045-360M | 36±20%     | 0.225         | 0.173 | 7.8                     | 1.62                 | 1.80  | 1.40                  | 1.50 |
| HNR6045-390M | 39±20%     | 0.234         | 0.180 | 7.8                     | 1.50                 | 1.60  | 1.25                  | 1.40 |
| HNR6045-430M | 43±20%     | 0.260         | 0.200 | 7.7                     | 1.63                 | 1.80  | 1.20                  | 1.30 |
| HNR6045-470M | 47±20%     | 0.260         | 0.200 | 6.4                     | 1.40                 | 1.50  | 1.20                  | 1.30 |
| HNR6045-510M | 51±20%     | 0.269         | 0.207 | 6.4                     | 1.35                 | 1.50  | 1.15                  | 1.20 |
| HNR6045-560M | 56±20%     | 0.287         | 0.221 | 6.4                     | 1.30                 | 1.40  | 1.10                  | 1.20 |
| HNR6045-620M | 62±20%     | 0.306         | 0.235 | 6.4                     | 1.25                 | 1.40  | 1.10                  | 1.20 |
| HNR6045-680M | 68±20%     | 0.376         | 0.289 | 6.4                     | 1.20                 | 1.30  | 1.00                  | 1.10 |
| HNR6045-750M | 75±20%     | 0.397         | 0.305 | 5                       | 1.15                 | 1.20  | 0.95                  | 1.00 |
| HNR6045-820M | 82±20%     | 0.443         | 0.341 | 4.9                     | 1.05                 | 1.10  | 0.90                  | 0.99 |
| HNR6045-910M | 91±20%     | 0.467         | 0.359 | 4.9                     | 1.00                 | 1.10  | 0.85                  | 0.94 |
| HNR6045-101M | 100±20%    | 0.650         | 0.550 | 4.2                     | 0.95                 | 1.00  | 0.80                  | 0.88 |
| HNR6045-121M | 120±20%    | 0.629         | 0.484 | 4.2                     | 0.85                 | 0.94  | 0.77                  | 0.85 |
| HNR6045-151M | 150±20%    | 0.754         | 0.580 | 4.2                     | 0.80                 | 0.88  | 0.70                  | 0.77 |
| HNR6045-221M | 220±20%    | 1.084         | 0.834 | 3.5                     | 0.70                 | 0.77  | 0.59                  | 0.65 |

## I SPECIFICATIONS

## HNR6045S Series

| Part Number  | Inductance      | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|-----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V      | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH              | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L               | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR6045-331M | 330 $\pm$ 20%   | 1.651         | 1.270 | 2.8                     | 0.57                 | 0.63 | 0.57                  | 0.63 |
| HNR6045-471M | 470 $\pm$ 20%   | 2.340         | 1.800 | 2.0                     | 0.50                 | 0.56 | 0.42                  | 0.48 |
| HNR6045-681M | 680 $\pm$ 20%   | 4.190         | 3.49  | 1.7                     | 0.42                 | 0.46 | 0.33                  | 0.38 |
| HNR6045-102M | 1000 $\pm$ 20%  | 5.850         | 4.500 | 0.5                     | 0.30                 | 0.35 | 0.30                  | 0.35 |
| HNR6045-152M | 1500 $\pm$ 20%  | 8.450         | 6.500 | 0.8                     | 0.24                 | 0.27 | 0.21                  | 0.24 |
| HNR6045-222K | 2200 $\pm$ 10%  | 12.48         | 10.40 | 0.9                     | 0.20                 | 0.23 | 0.17                  | 0.20 |
| HNR6045-332K | 3300 $\pm$ 10%  | 15.96         | 13.30 | 0.7                     | 0.17                 | 0.20 | 0.15                  | 0.17 |
| HNR6045-472K | 4700 $\pm$ 10%  | 23.70         | 19.75 | 0.6                     | 0.15                 | 0.17 | 0.12                  | 0.14 |
| HNR6045-682K | 6800 $\pm$ 10%  | 40.20         | 33.50 | 0.5                     | 0.12                 | 0.14 | 0.09                  | 0.11 |
| HNR6045-103K | 10000 $\pm$ 10% | 46.68         | 38.90 | 0.4                     | 0.10                 | 0.12 | 0.08                  | 0.10 |
| HNR6045-123K | 12000 $\pm$ 10% | 74.40         | 62.00 | 0.4                     | 0.09                 | 0.11 | 0.07                  | 0.08 |
| HNR6045-153K | 15000 $\pm$ 10% | 84.00         | 70.00 | 0.4                     | 0.09                 | 0.10 | 0.06                  | 0.07 |

## NR8040S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |       | Heat Rating Currents |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|-------|----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ.  | Max.                 | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |       | A                    |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |       | Irms                 |      |
| HNR8040-R82N | 0.82 $\pm$ 30% | 0.010         | 0.008 | 94                      | 13.80                | 16.00 | 6.30                 | 6.90 |
| HNR8040-1R0N | 1.0 $\pm$ 30%  | 0.010         | 0.008 | 89                      | 9.85                 | 14.00 | 6.30                 | 6.90 |
| HNR8040-1R2N | 1.2 $\pm$ 30%  | 0.013         | 0.010 | 59                      | 10.00                | 14.00 | 5.65                 | 6.20 |
| HNR8040-1R5N | 1.5 $\pm$ 30%  | 0.013         | 0.010 | 67                      | 8.15                 | 11.00 | 5.65                 | 6.20 |
| HNR8040-2R0N | 2.0 $\pm$ 30%  | 0.016         | 0.012 | 43                      | 9.25                 | 10.00 | 5.15                 | 5.60 |
| HNR8040-2R2N | 2.2 $\pm$ 30%  | 0.016         | 0.012 | 41                      | 7.10                 | 8.00  | 5.15                 | 5.60 |
| HNR8040-3R0N | 3.0 $\pm$ 30%  | 0.018         | 0.014 | 32                      | 6.10                 | 7.00  | 4.70                 | 5.20 |
| HNR8040-3R3N | 3.3 $\pm$ 30%  | 0.022         | 0.017 | 27                      | 6.50                 | 7.00  | 4.40                 | 4.80 |
| HNR8040-3R6N | 3.6 $\pm$ 30%  | 0.022         | 0.017 | 30                      | 7.52                 | 8.50  | 4.35                 | 4.80 |
| HNR8040-3R9N | 3.9 $\pm$ 30%  | 0.022         | 0.017 | 26                      | 5.75                 | 6.50  | 4.35                 | 4.80 |
| HNR8040-4R7N | 4.7 $\pm$ 30%  | 0.025         | 0.019 | 24                      | 5.90                 | 6.50  | 4.10                 | 4.50 |
| HNR8040-5R1N | 5.1 $\pm$ 30%  | 0.025         | 0.019 | 22                      | 4.70                 | 5.40  | 4.05                 | 4.40 |
| HNR8040-5R6N | 5.6 $\pm$ 30%  | 0.027         | 0.021 | 24                      | 6.00                 | 6.90  | 3.85                 | 4.20 |
| HNR8040-6R2N | 6.2 $\pm$ 30%  | 0.027         | 0.021 | 20                      | 4.45                 | 5.10  | 3.85                 | 4.20 |
| HNR8040-6R8M | 6.8 $\pm$ 20%  | 0.031         | 0.024 | 20                      | 4.55                 | 5.20  | 3.60                 | 4.00 |
| HNR8040-8R2M | 8.2 $\pm$ 20%  | 0.034         | 0.026 | 17                      | 4.20                 | 4.80  | 3.45                 | 3.80 |
| HNR8040-100M | 10 $\pm$ 20%   | 0.038         | 0.029 | 15                      | 3.60                 | 4.10  | 3.30                 | 3.60 |
| HNR8040-120M | 12 $\pm$ 20%   | 0.053         | 0.041 | 13                      | 3.50                 | 4.00  | 2.80                 | 3.00 |
| HNR8040-150M | 15 $\pm$ 20%   | 0.061         | 0.047 | 12                      | 2.95                 | 3.40  | 2.60                 | 2.80 |
| HNR8040-180M | 18 $\pm$ 20%   | 0.069         | 0.053 | 11                      | 2.70                 | 3.10  | 2.40                 | 2.60 |
| HNR8040-220M | 22 $\pm$ 20%   | 0.090         | 0.069 | 9.5                     | 2.40                 | 2.70  | 2.10                 | 2.30 |
| HNR8040-270M | 27 $\pm$ 20%   | 0.101         | 0.078 | 9.2                     | 2.15                 | 2.50  | 2.00                 | 2.20 |
| HNR8040-330M | 33 $\pm$ 20%   | 0.126         | 0.097 | 7.8                     | 2.05                 | 2.40  | 1.80                 | 2.00 |
| HNR8040-360M | 36 $\pm$ 20%   | 0.133         | 0.102 | 7.8                     | 2.00                 | 2.30  | 1.75                 | 1.90 |
| HNR8040-390M | 39 $\pm$ 20%   | 0.139         | 0.107 | 7.8                     | 1.95                 | 2.20  | 1.70                 | 1.90 |
| HNR8040-430M | 43 $\pm$ 20%   | 0.147         | 0.113 | 7.8                     | 1.90                 | 2.20  | 1.65                 | 1.80 |
| HNR8040-470M | 47 $\pm$ 20%   | 0.177         | 0.136 | 6.4                     | 1.75                 | 2.00  | 1.55                 | 1.70 |
| HNR8040-510M | 51 $\pm$ 20%   | 0.185         | 0.142 | 6.4                     | 1.70                 | 1.90  | 1.50                 | 1.60 |

## I SPECIFICATIONS

## HNR8040S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR8040-620M | 62 $\pm$ 20%   | 0.237         | 0.182 | 6.4                     | 1.50                 | 1.60 | 1.30                  | 1.40 |
| HNR8040-680M | 68 $\pm$ 20%   | 0.255         | 0.196 | 4.9                     | 1.45                 | 1.60 | 1.25                  | 1.40 |
| HNR8040-750M | 75 $\pm$ 20%   | 0.274         | 0.211 | 4.9                     | 1.35                 | 1.50 | 1.20                  | 1.30 |
| HNR8040-820M | 82 $\pm$ 20%   | 0.293         | 0.225 | 5.9                     | 1.30                 | 1.40 | 1.15                  | 1.20 |
| HNR8040-910M | 91 $\pm$ 20%   | 0.354         | 0.272 | 4.9                     | 1.20                 | 1.30 | 1.05                  | 1.10 |
| HNR8040-101M | 100 $\pm$ 20%  | 0.377         | 0.290 | 4.2                     | 1.15                 | 1.30 | 1.00                  | 1.10 |
| HNR8040-121M | 120 $\pm$ 20%  | 0.434         | 0.334 | 3.5                     | 1.05                 | 1.10 | 0.95                  | 1.00 |
| HNR8040-151M | 150 $\pm$ 20%  | 0.533         | 0.410 | 3.5                     | 1.10                 | 1.20 | 0.85                  | 0.94 |
| HNR8040-181M | 180 $\pm$ 20%  | 0.676         | 0.520 | 3.5                     | 0.95                 | 1.15 | 0.83                  | 0.92 |
| HNR8040-221M | 220 $\pm$ 20%  | 0.779         | 0.599 | 3.5                     | 0.85                 | 0.94 | 0.80                  | 0.88 |
| HNR8040-331M | 330 $\pm$ 20%  | 1.156         | 0.889 | 2.8                     | 0.68                 | 0.75 | 0.64                  | 0.70 |
| HNR8040-471M | 470 $\pm$ 20%  | 1.625         | 1.260 | 2.1                     | 0.60                 | 0.70 | 0.50                  | 0.60 |
| HNR8040-681M | 680 $\pm$ 20%  | 2.652         | 2.040 | 1.7                     | 0.50                 | 0.60 | 0.45                  | 0.50 |
| HNR8040-102M | 1000 $\pm$ 20% | 3.640         | 2.800 | 1.4                     | 0.40                 | 0.50 | 0.35                  | 0.40 |
| HNR8040-152M | 1500 $\pm$ 20% | 6.500         | 5.000 | 1.0                     | 0.32                 | 0.38 | 0.26                  | 0.27 |

## HNR8050S Series

| Part Number  | Inductance      | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|-----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V      | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH              | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L               | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR8050-102M | 1000 $\pm$ 20%  | 2.52          | 2.10  | 1.5                     | 0.32                 | 0.35 | 0.33                  | 0.35 |
| HNR8050-103M | 10000 $\pm$ 20% | 22.80         | 19.00 | 0.35                    | 0.09                 | 0.10 | 0.11                  | 0.13 |

\*The test frequency of FNR8050S103MT is 1 KHz.

## HNR8065S Series

| Part Number  | Inductance     | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |       | Heat Rating Current*4 |      |
|--------------|----------------|---------------|-------|-------------------------|----------------------|-------|-----------------------|------|
|              | 100kHz, 1V     | Max.          | Typ.  | Min.                    | Max.                 | Typ.  | Max.                  | Typ. |
| Units        | uH             | $\Omega$      |       | MHz                     | A                    |       | A                     |      |
| Symbol       | L              | DCR           |       | S. R. F                 | Isat                 |       | Irms                  |      |
| HNR8065-1R0M | 1.0 $\pm$ 20%  | 0.011         | 0.008 | 96                      | 20.0                 | 22.0  | 7.00                  | 8.00 |
| HNR8065-3R3M | 3.3 $\pm$ 20%  | 0.018         | 0.015 | 27                      | 9.50                 | 10.00 | 5.10                  | 5.90 |
| HNR8065-4R7M | 4.7 $\pm$ 20%  | 0.022         | 0.018 | 18                      | 8.50                 | 9.50  | 4.70                  | 5.40 |
| HNR8065-5R6M | 5.6 $\pm$ 20%  | 0.026         | 0.022 | 17                      | 8.00                 | 9.00  | 4.50                  | 5.20 |
| HNR8065-6R8M | 6.8 $\pm$ 20%  | 0.026         | 0.022 | 16                      | 7.50                 | 8.00  | 4.50                  | 5.20 |
| HNR8065-8R2M | 8.2 $\pm$ 20%  | 0.031         | 0.026 | 15                      | 7.00                 | 7.70  | 4.20                  | 4.80 |
| HNR8065-100M | 10 $\pm$ 20%   | 0.044         | 0.037 | 13                      | 8.00                 | 8.90  | 3.20                  | 3.70 |
| HNR8065-220M | 22 $\pm$ 20%   | 0.065         | 0.054 | 8                       | 4.30                 | 4.80  | 2.85                  | 3.30 |
| HNR8065-431M | 430 $\pm$ 20%  | 1.200         | 1.000 | 1.5                     | 0.95                 | 1.05  | 0.61                  | 0.69 |
| HNR8065-102M | 1000 $\pm$ 20% | 2.820         | 2.350 | 1.1                     | 0.65                 | 0.73  | 0.40                  | 0.45 |
| HNR8065-152M | 1500 $\pm$ 20% | 4.380         | 3.650 | 0.7                     | 0.54                 | 0.60  | 0.32                  | 0.37 |
| HNR8065-222M | 2200 $\pm$ 20% | 6.000         | 5.000 | 0.7                     | 0.45                 | 0.51  | 0.27                  | 0.31 |
| HNR8065-332M | 3300 $\pm$ 20% | 8.760         | 7.300 | 0.7                     | 0.36                 | 0.40  | 0.23                  | 0.26 |

## I SPECIFICATIONS

## HNR8065S Series

| Part Number  | Inductance      | DC Resistance |       | Self-resonant Frequency | Saturation Current*3 |      | Heat Rating Current*4 |      |
|--------------|-----------------|---------------|-------|-------------------------|----------------------|------|-----------------------|------|
|              | 100kHz, 1V      | Max.          | Typ.  | Min.                    | Max.                 | Typ. | Max.                  | Typ. |
| Units        | uH              | $\Omega$      |       | MHz                     | A                    |      | A                     |      |
| Symbol       | L               | DCR           |       | S. R. F                 | Isat                 |      | Irms                  |      |
| HNR8065-472M | 4700 $\pm$ 20%  | 14.58         | 12.15 | 0.4                     | 0.29                 | 0.33 | 0.18                  | 0.20 |
| HNR8065-682M | 6800 $\pm$ 20%  | 22.44         | 18.70 | 0.4                     | 0.26                 | 0.29 | 0.14                  | 0.16 |
| HNR8065-103M | 10000 $\pm$ 20% | 27.36         | 22.80 | 0.4                     | 0.20                 | 0.23 | 0.13                  | 0.15 |

X1: All test data is referenced to 20° C ambient;

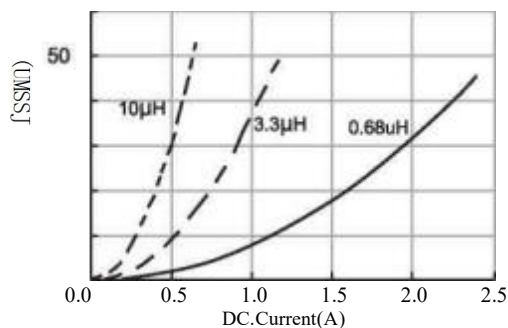
X2: Rated current: Isat or Irms, whichever is smaller;

※3: Isat: DC current at which the inductance drops approximate 30% from its value without current; ※4: Irms: DC current that causes the temperature rise (AT =40° C) from 20° C ambient.

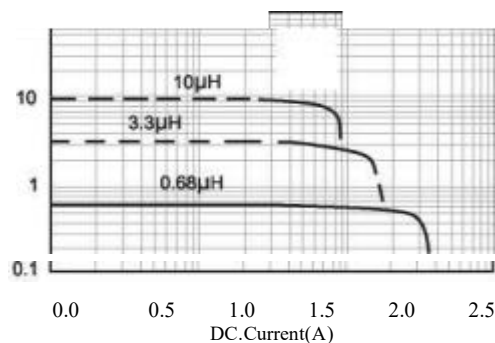
## TYPICAL ELECTRICAL CHARACTERISTICS

## HNR252010S Series

Temperature vs. DC Current Characteristics

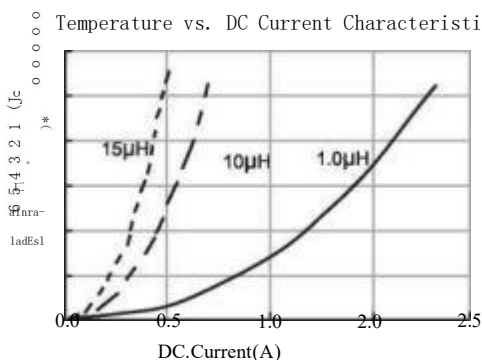


Inductance vs. DC Current Characteristics

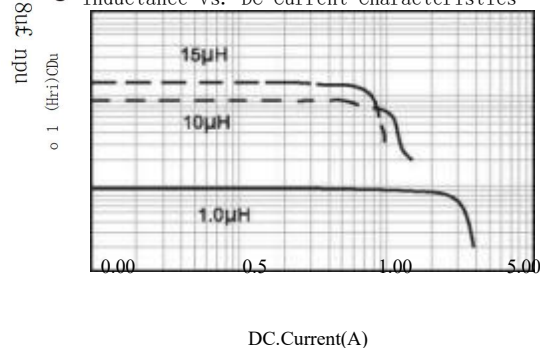


## HNR252012S Series

Temperature vs. DC Current Characteristics

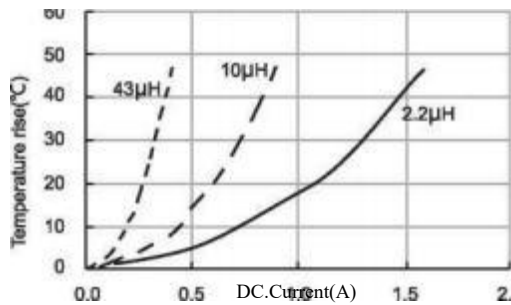


Inductance vs. DC Current Characteristics

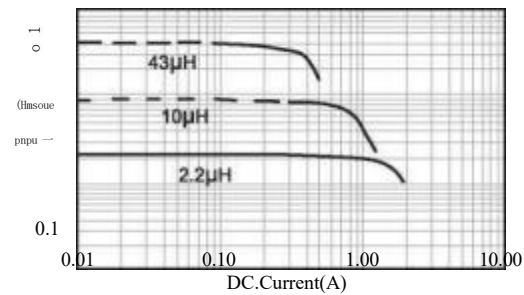


## HNR3010S Series

Temperature vs. DC Current Characteristics

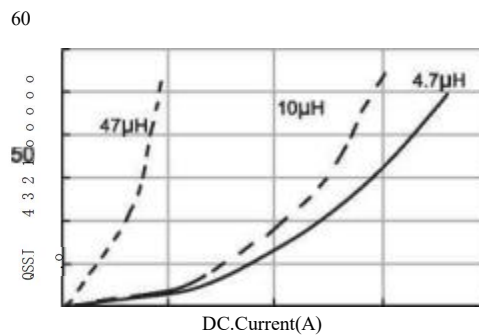


Inductance vs. DC Current Characteristics

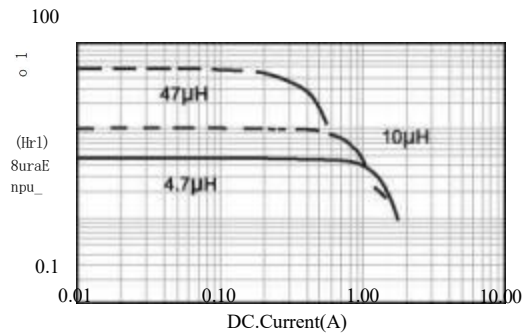


## HNR3012S Series

Temperature vs. DC Current Characteristics

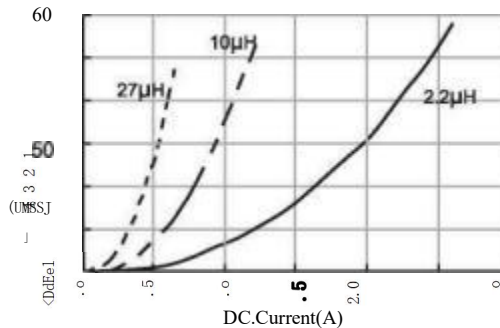


Inductance vs. DC Current Characteristics

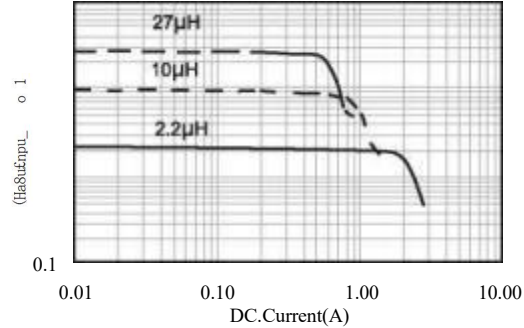


## HNR4010S Series

Temperature vs. DC Current Characteristics

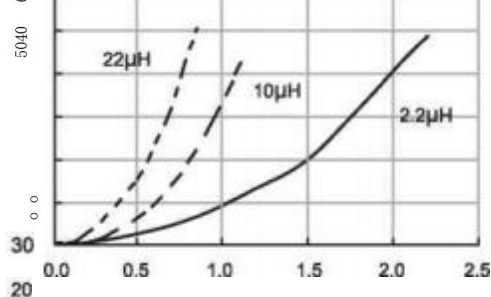


Inductance vs. DC Current Characteristics

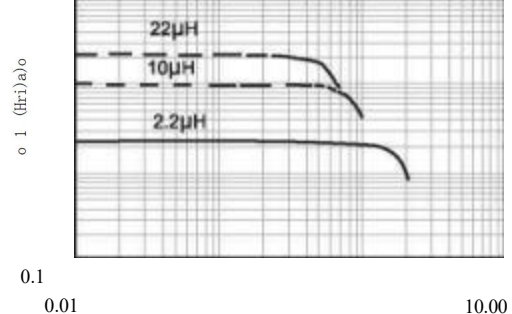


## NR4012S Series

Temperature vs. DC Current Characteristics



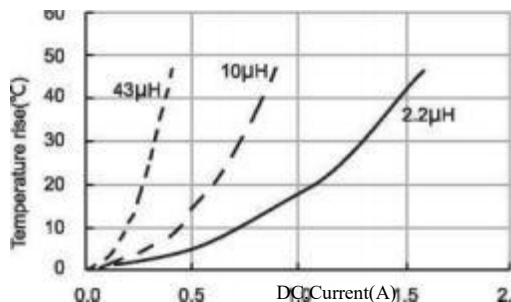
Inductance vs. DC Current Characteristics



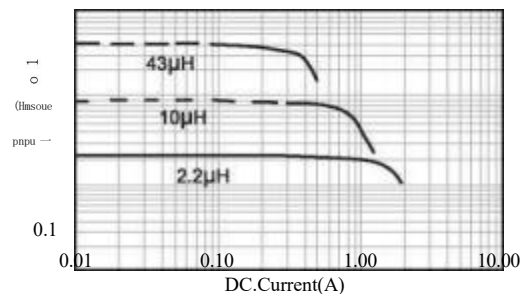
## TYPICAL ELECTRICAL CHARACTERISTICS

## HNR4018S Series

Temperature vs. DC Current Characteristics

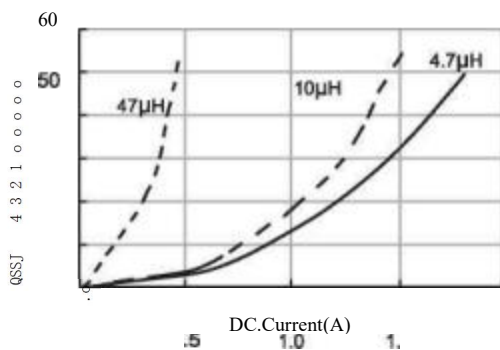


Inductance vs. DC Current Characteristics

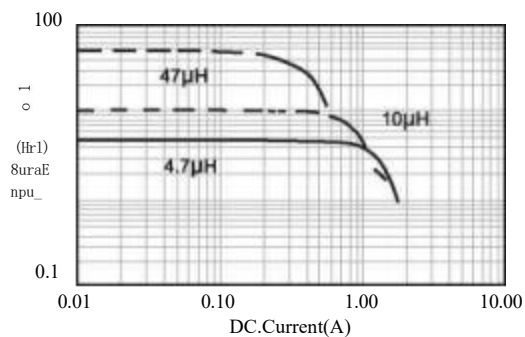


## HNR4020S Series

Temperature vs. DC Current Characteristics

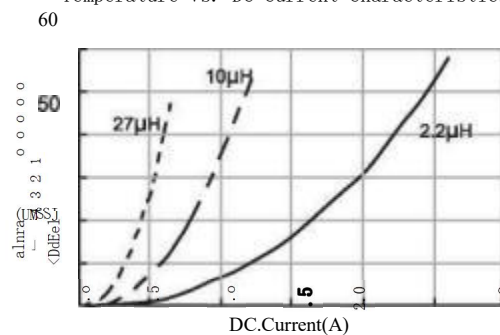


Inductance vs. DC Current Characteristics

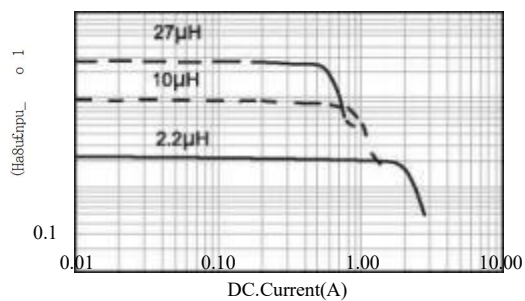


## HNR4030S Series

Temperature vs. DC Current Characteristics

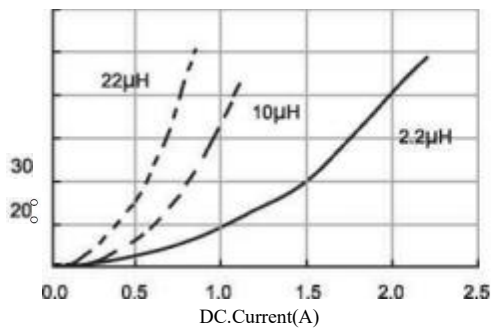


Inductance vs. DC Current Characteristics

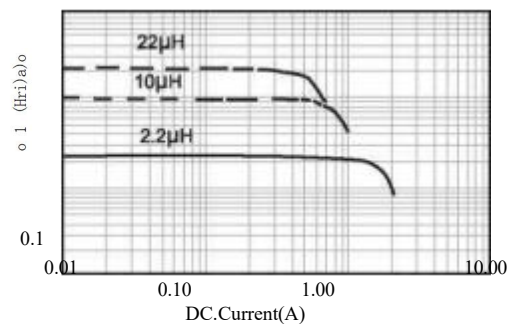


## HNR5012S Series

Temperature vs. DC Current Characteristics

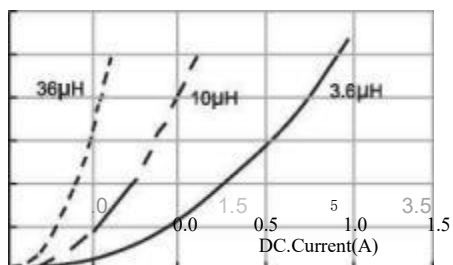


Inductance vs. DC Current Characteristics

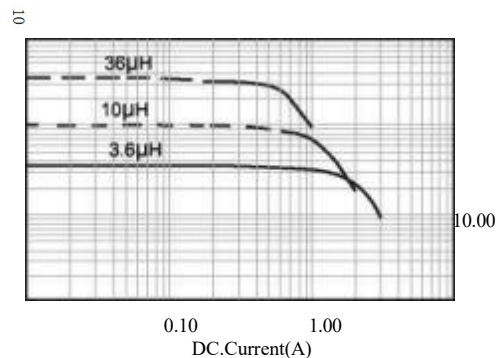


## HNR5020S Series

Temperature vs. DC Current Characteristics

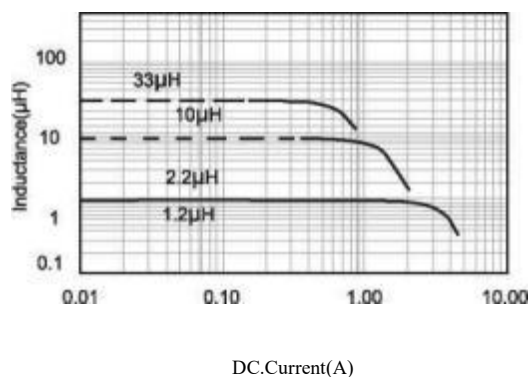
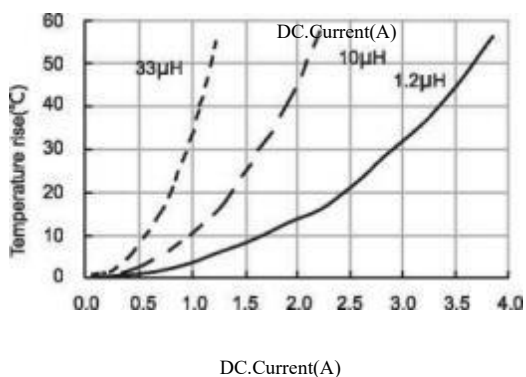


Temperature vs. DC Current Characteristics



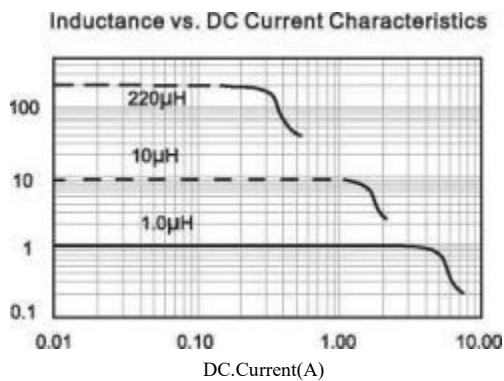
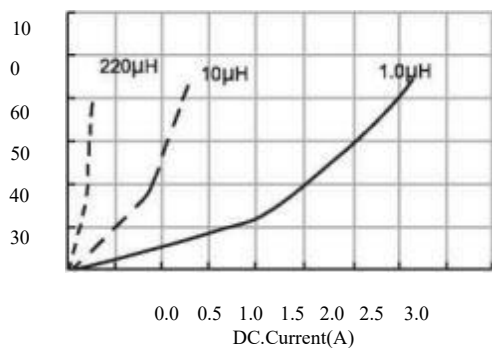
## HNR5030S Series

Temperature vs. DC Current Characteristics



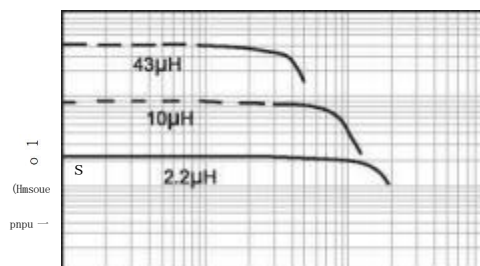
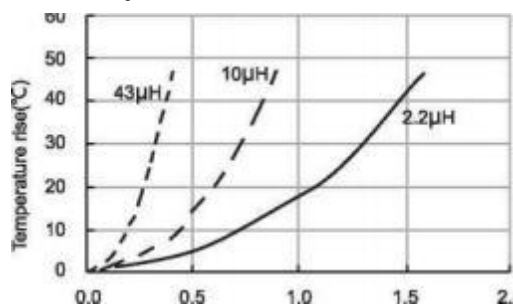
## HNR5040S Series

Temperature vs. DC Current Characteristics



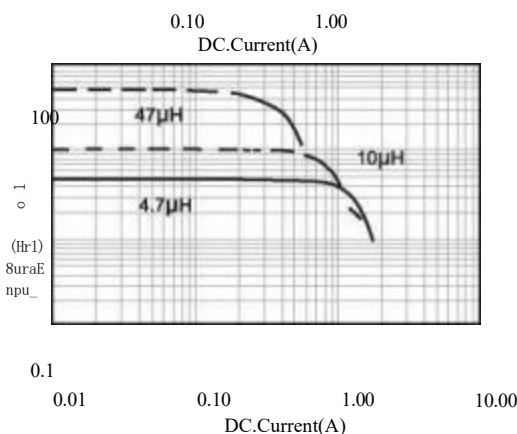
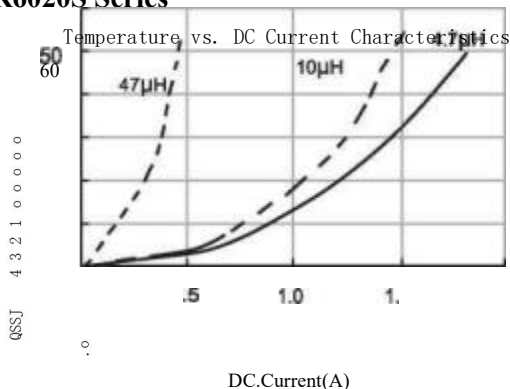
## HNR5045S Series

Temperature vs. DC Current Characteristics

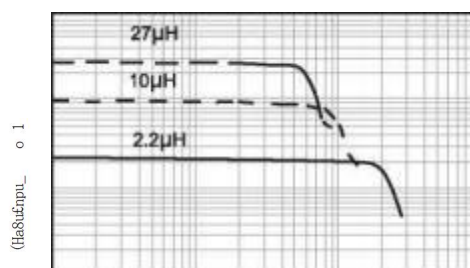
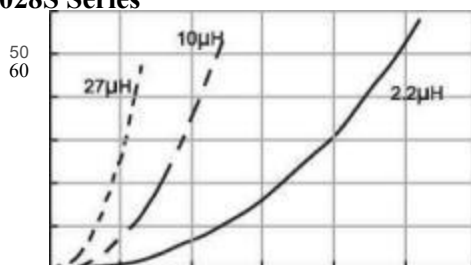


## HNR6020S Series

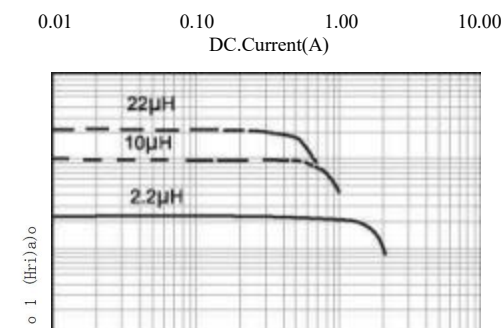
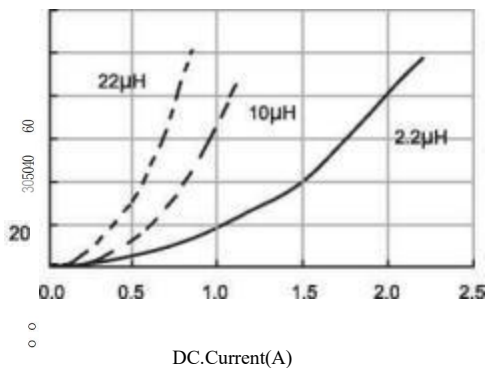
Temperature vs. DC Current Characteristics



## HNR6028S Series

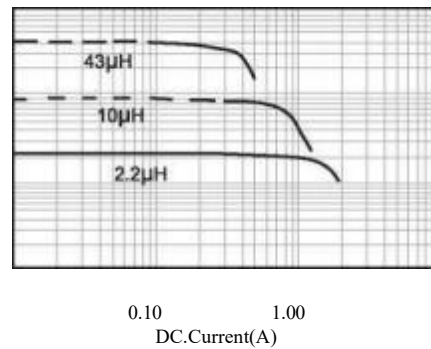
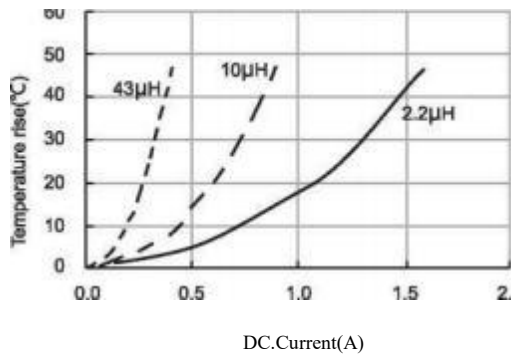


## HNR6045S Series

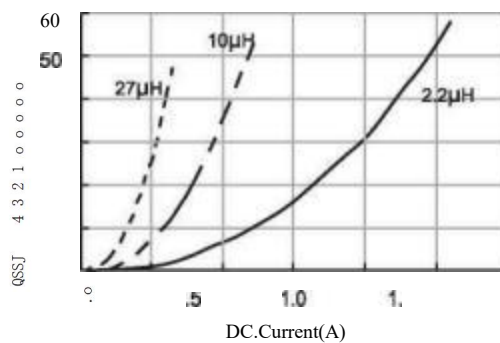


**HNR8040S Series**

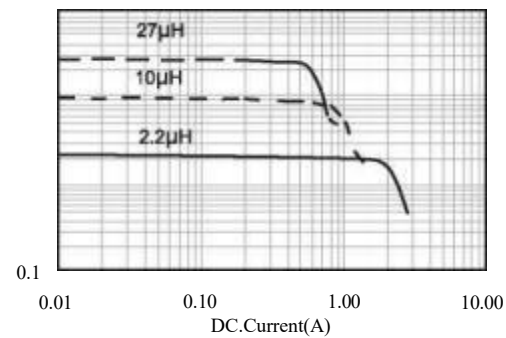
Temperature vs. DC Current Characteristics

**HNR8050S Series**

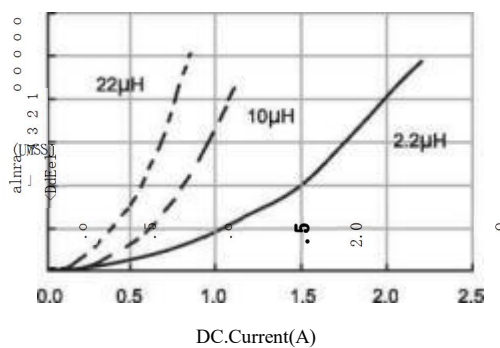
Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

**HNR8065S Series**

Inductance vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

