

FEATURES

- SIZES K(0402), J (0603), D (0805), C (1008), E (1206), A (1210) and B (1812)
- HIGH Q, HIGH CURRENT AND HIGH SRF CHARACTERISTICS
- EXPANDED PERFORMANCE TYPES NOW AVAILABLE
- EMBOSSED PLASTIC CARRIER PACKAGING FOR AUTOMATIC PICK-PLACE



PARAMETER CHARACTERISTICS

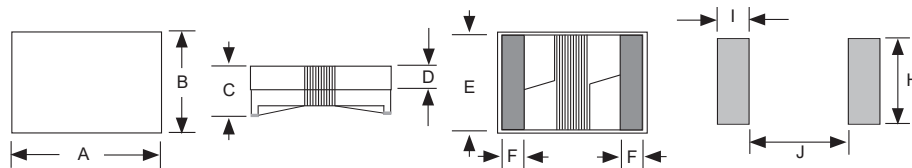
| Specifications | Case Size Code | | | | | | |
|-----------------------------|---|---------------|---------------|---------------|---------------|---------------|--------------|
| | 0402 (K) | 0603 (J) | 0805 (D) | 1008 (C) | 1206 (E) | 1210 (A) | 1812 (B) |
| Inductance Range | 0.8nH ~ 120nH | 1.6nH ~ 560nH | 2.2nH ~ 1.0µH | 4.7nH ~ 8.2µH | 3.3nH ~ 1.2µH | 3.9nH ~ 8.6µH | 1.0µH ~ 33µH |
| Inductance Tolerance | ±0.2nH (C), ±0.3nH (S), ±0.5 (D), ±2% (G), ±3% (H), ±5% (J), ±10% (K), ±20% (M) | | | | | | |
| Operating Temperature Range | -40°C ~ +125°C | | | | | | |

ENVIRONMENTAL CHARACTERISTICS

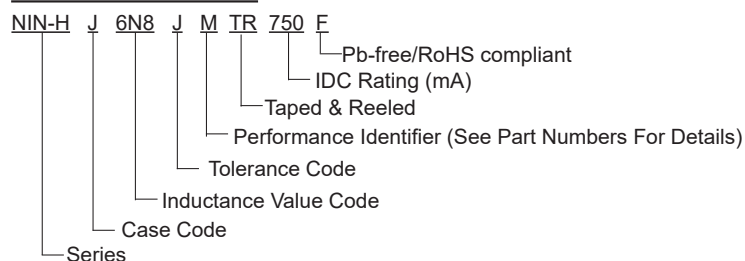
| Test | Specifications | Test Method & Condition |
|------------------------------|---|--|
| Solderability | 75% Min. Coverage | After 3 sec. dip in +230°C soldering pot (post flux) |
| Resistance to Soldering Heat | (1) No evidence of damage (2) Inductance change ±5% of initial value (3) Q factor within ±10% of initial value (±20% for 0402 & 0603 case sizes) | After 5 seconds at +260°C (with pre-conditioning) |
| Humidity | (1) No evidence of damage | After 500 hours at 60°C and 90 ~ 95% RH |
| Low Frequency Vibration | (2) Inductance change ±5% of initial value (±10% for 0402 case size) | (0402 case size - after 96 hours 50°C and 90 ~ 95% RH) After 2 hrs per axis, 10 ~ 55Hz, 1.5mm amplitude |
| Thermal Shock | (3) Q factor within ±10% of initial value (±20% for 0402 & 0603 case sizes) | After 100 cycles (10 cycles 0402) at -40°C and +125°C (30 minutes at each temperature) |
| Low Temperature Storage | | After 500 hrs at -40°C |
| High Temperature Load Life | (1) No evidence of damage (2) Inductance change ±10% of initial value (±20% for 0402 case size) (3) Q factor within ±10% of initial value (±20% for 0402 & 0603 case sizes) | After 500 hrs at +125°C with rated DC current (0402 case size - after 1,000 hrs at +85°C) |
| Humidity Load Life | No evidence of short or open circuit | After 500 hrs at 60°C with 90 ~ 95% RH with rated DC current (0402 case size- 1,000 hrs at +40°C) |

COMPONENT & RECOMMEND LAND PATTERN DIMENSIONS (mm):

| Type | Case Size | A max. | B max. | C max. | D typ. | E typ. | F typ. | H typ. | I typ. | J typ. |
|--------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| NIN-HK | 0402 | 1.19 | 0.64 | 0.66 | 0.20 | 0.523 | 0.215 | 0.65 | 0.35 | 0.50 |
| NIN-HJ | 0603 | 1.80 | 1.12 | 1.02 | 0.38 | 0.76 | 0.33 | 1.02 | 0.36 | 0.46 |
| NIN-HD | 0805 | 2.29 | 1.68 | 1.55 | 0.51 | 1.27 | 0.50 | 1.78 | 1.02 | 0.76 |
| NIN-HC | 1008 | 2.92 | 2.79 | 2.29 | 0.51 | 2.10 | 0.50 | 2.54 | 1.02 | 1.27 |
| NIN-HE | 1206 | 3.56 | 2.16 | 1.52 | .051 | 1.60 | 0.50 | 1.93 | 1.02 | 1.78 |
| NIN-HA | 1210 | 3.65 | 2.95 | 2.70 | 0.51 | 2.10 | .050 | 3.02 | 1.02 | 1.78 |
| NIN-HB | 1812 | 4.95 | 3.81 | 3.43 | 1.78 | 2.90 | .058 | 3.05 | 1.14 | 3.00 |



PART NUMBER SYSTEM



NIN-HK SERIES

K-SIZE (0402)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|-------------------|-----------------------|-----------|-----------------|-----|----------|-------------------|----------------------------|-----------------------|
| | | | L | Q | | | | |
| NIN-HK0N8_TR1000F | 0.8 | C,S,D,K | 250 | 250 | 14 | 12500 | 0.035 | 1000 |
| NIN-HK1N0_TR650F | 1 | C,S,D,K | 250 | 250 | 10 | 12300 | 0.085 | 650 |
| NIN-HK1N8_TR950F | 1.8 | C,S,D,J,K | 250 | 250 | 20 | 14000 | 0.043 | 950 |
| NIN-HK1N9_TR950F | 1.9 | C,S,D,J,K | 250 | 250 | 20 | 13800 | 0.043 | 950 |
| NIN-HK2N0_TR950F | 2 | C,S,D,J,K | 250 | 250 | 23 | 14000 | 0.043 | 950 |
| NIN-HK2N2_TR820F | 2.2 | C,S,D,J,K | 250 | 250 | 22 | 13700 | 0.058 | 820 |
| NIN-HK2N4_TR650F | 2.4 | C,S,D,J,K | 250 | 250 | 18 | 12100 | 0.091 | 650 |
| NIN-HK2N7_TR900F | 2.7 | C,S,D,J,K | 250 | 250 | 24 | 13200 | 0.05 | 900 |
| NIN-HK3N0_TR790F | 3 | S,D,K | 250 | 250 | 24 | 11400 | 0.063 | 790 |
| NIN-HK3N3_TR790F | 3.3 | C,S,D,J,K | 250 | 250 | 24 | 11500 | 0.063 | 790 |
| NIN-HK3N6_TR790F | 3.6 | C,S,D,J,K | 250 | 250 | 24 | 9700 | 0.063 | 790 |
| NIN-HK3N9_TR790F | 3.9 | C,S,D,J,K | 250 | 250 | 24 | 8900 | 0.063 | 790 |
| NIN-HK4N1_TR700F | 4.1 | C,S,D,J,K | 250 | 250 | 22 | 9400 | 0.07 | 700 |
| NIN-HK4N3_TR750F | 4.3 | C,S,D,J,K | 250 | 250 | 22 | 7700 | 0.07 | 750 |
| NIN-HK4N7_TR570F | 4.7 | C,S,D,J,K | 250 | 250 | 20 | 7800 | 0.12 | 570 |
| NIN-HK5N1_TR620F | 5.1 | C,S,D,J,K | 250 | 250 | 23 | 9800 | 0.1 | 620 |
| NIN-HK5N6_TR710F | 5.6 | C,S,D,J,K | 250 | 250 | 25 | 8400 | 0.078 | 710 |
| NIN-HK5N8_TR710F | 5.8 | C,S,D,J,K | 250 | 250 | 25 | 8100 | 0.078 | 710 |
| NIN-HK6N2_TR710F | 6.2 | C,S,D,J,K | 250 | 250 | 25 | 6500 | 0.078 | 710 |
| NIN-HK6N8_TR610F | 6.8 | G,H,J,K | 250 | 250 | 24 | 6000 | 0.105 | 610 |
| NIN-HK7N5_TR570F | 7.5 | G,H,J,K | 250 | 250 | 25 | 6000 | 0.12 | 570 |
| NIN-HK8N2_TR590F | 8.2 | G,H,J,K | 250 | 250 | 25 | 5500 | 0.11 | 590 |
| NIN-HK8N7_TR590F | 8.7 | G,H,J,K | 250 | 250 | 25 | 5500 | 0.11 | 590 |
| NIN-HK9N0_TR590F | 9 | G,H,J,K | 250 | 250 | 25 | 5500 | 0.11 | 590 |
| NIN-HK9N1_TR590F | 9.1 | G,H,J,K | 250 | 250 | 25 | 5500 | 0.11 | 590 |
| NIN-HK100_TR510F | 10 | G,H,J,K | 250 | 250 | 24 | 5500 | 0.15 | 510 |
| NIN-HK110_TR570F | 11 | G,H,J,K | 250 | 250 | 26 | 5500 | 0.12 | 570 |
| NIN-HK120_TR570F | 12 | G,H,J,K | 250 | 250 | 26 | 5500 | 0.12 | 570 |
| NIN-HK130_TR460F | 13 | G,H,J,K | 250 | 250 | 24 | 5000 | 0.18 | 460 |
| NIN-HK140_TR430F | 14 | G,H,J,K | 250 | 250 | 26 | 5000 | 0.21 | 430 |
| NIN-HK150_TR430F | 15 | G,H,J,K | 250 | 250 | 26 | 5000 | 0.21 | 430 |
| NIN-HK160_TR370F | 16 | G,H,J,K | 250 | 250 | 25 | 4500 | 0.28 | 370 |
| NIN-HK180_TR370F | 18 | G,H,J,K | 250 | 250 | 25 | 4500 | 0.28 | 370 |
| NIN-HK190_TR400F | 19 | G,H,J,K | 250 | 250 | 26 | 4000 | 0.24 | 400 |
| NIN-HK200_TR400F | 20 | G,H,J,K | 250 | 250 | 26 | 4000 | 0.24 | 400 |
| NIN-HK220_TR330F | 22 | G,H,J,K | 250 | 250 | 25 | 4000 | 0.36 | 330 |
| NIN-HK230_TR330F | 23 | G,H,J,K | 250 | 250 | 25 | 3800 | 0.36 | 330 |
| NIN-HK240_TR330F | 24 | G,H,J,K | 250 | 250 | 25 | 3500 | 0.36 | 330 |
| NIN-HK270_TR320F | 27 | G,H,J,K | 250 | 250 | 25 | 3500 | 0.38 | 320 |
| NIN-HK300_TR320F | 30 | G,H,J,K | 250 | 250 | 25 | 3300 | 0.38 | 320 |
| NIN-HK330_TR260F | 33 | G,H,J,K | 250 | 250 | 24 | 3200 | 0.55 | 260 |
| NIN-HK360_TR250F | 36 | G,H,J,K | 250 | 250 | 25 | 3100 | 0.6 | 250 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.



NIN-HK SERIES

K-SIZE (0402)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|------------------|-----------------------|---------|-----------------|-----|----------|-------------------|----------------------------|-----------------------|
| | | | L | Q | | | | |
| NIN-HK380_TR250F | 38 | G,H,J,K | 250 | 250 | 25 | 3000 | 0.6 | 250 |
| NIN-HK390_TR250F | 39 | G,H,J,K | 250 | 250 | 25 | 3000 | 0.6 | 250 |
| NIN-HK430_TR240F | 43 | G,H,J,K | 250 | 250 | 25 | 3000 | 0.68 | 240 |
| NIN-HK470_TR200F | 47 | G,H,J,K | 250 | 250 | 25 | 2900 | 0.95 | 200 |
| NIN-HK510_TR200F | 51 | G,H,J,K | 250 | 250 | 25 | 2850 | 0.95 | 200 |
| NIN-HK560_TR190F | 56 | G,H,J,K | 250 | 250 | 25 | 2800 | 1.05 | 190 |
| NIN-HK620_TR190F | 62 | G,H,J,K | 250 | 250 | 25 | 2600 | 1.05 | 190 |
| NIN-HK680_TR170F | 68 | G,H,J,K | 250 | 250 | 25 | 2500 | 1.35 | 170 |
| NIN-HK750_TR140F | 75 | G,H,J,K | 250 | 250 | 24 | 2400 | 1.75 | 140 |
| NIN-HK820_TR140F | 82 | G,H,J,K | 250 | 250 | 25 | 2300 | 1.9 | 140 |
| NIN-HK910_TR140F | 91 | G,H,J,K | 250 | 250 | 25 | 2100 | 1.95 | 140 |
| NIN-HK960_TR130F | 96 | G,H,J,K | 250 | 250 | 24 | 1500 | 2.06 | 130 |
| NIN-HKR10_TR130F | 100 | G,H,J,K | 250 | 250 | 24 | 1500 | 2.06 | 130 |
| NIN-HKR11_TR120F | 110 | G,H,J,K | 250 | 250 | 25 | 1200 | 2.38 | 120 |
| NIN-HKR12_TR110F | 120 | J,K | 250 | 250 | 25 | 1000 | 2.66 | 110 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

Wirewound Chip Inductors

NIN-HK SERIES

K-SIZE (0402)

"M" EXTENDED PERFORMANCE

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|-------------------|-----------------------|-------|-----------------|-----|----------|-------------------|----------------------------|-----------------------|
| | | | L | Q | | | | |
| NIN-HK300_MTR270F | 30 | G,H,J | 100 | 250 | 25 | 3300 | 0.58 | 270 |
| NIN-HK330_MTR260F | 33 | G,H,J | 100 | 250 | 25 | 3200 | 0.63 | 260 |
| NIN-HK360_MTR260F | 36 | G,H,J | 100 | 250 | 25 | 3100 | 0.63 | 260 |
| NIN-HK390_MTR250F | 39 | G,H,J | 100 | 250 | 25 | 3000 | 0.7 | 250 |
| NIN-HK400_MTR250F | 40 | G,H,J | 100 | 250 | 25 | 3000 | 0.7 | 250 |
| NIN-HK430_MTR250F | 43 | G,H,J | 100 | 250 | 25 | 3000 | 0.7 | 250 |
| NIN-HK470_MTR210F | 47 | G,H,J | 100 | 200 | 25 | 2900 | 1.08 | 210 |
| NIN-HK510_MTR210F | 51 | G,H,J | 100 | 200 | 25 | 2850 | 1.08 | 210 |
| NIN-HK560_MTR200F | 56 | G,H,J | 100 | 200 | 25 | 2800 | 1.17 | 200 |
| NIN-HK620_MTR145F | 62 | G,H,J | 100 | 200 | 20 | 2600 | 1.82 | 145 |
| NIN-HK680_MTR140F | 68 | G,H,J | 100 | 200 | 20 | 2500 | 1.96 | 140 |
| NIN-HK720_MTR135F | 72 | G,H,J | 100 | 150 | 20 | 2500 | 2.1 | 135 |
| NIN-HK750_MTR135F | 75 | G,H,J | 100 | 150 | 20 | 2400 | 2.1 | 135 |
| NIN-HK820_MTR130F | 82 | G,H,J | 100 | 150 | 20 | 2300 | 2.24 | 130 |
| NIN-HK910_MTR125F | 91 | G,H,J | 100 | 150 | 20 | 2100 | 2.38 | 125 |
| NIN-HKR10_MTR120F | 100 | G,H,J | 100 | 150 | 20 | 1500 | 2.52 | 120 |
| NIN-HKR12_MTR110F | 120 | G,H,J | 100 | 150 | 20 | 1000 | 2.66 | 110 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.



NIN-HJ SERIES

J-SIZE (0603)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|-------------------|-----------------------|-----------|-----------------|-----|----------|-------------------|----------------------------|-----------------------|
| | | | L | Q | | | | |
| NIN-HJ1N6_TR1150F | 1.6 | S,K | 250 | 250 | 22 | 14000 | 0.035 | 1150 |
| NIN-HJ1N7_TR1000F | 1.7 | C,S,D,J,K | 250 | 250 | 16 | 14000 | 0.043 | 1000 |
| NIN-HJ1N8_TR1000F | 1.8 | C,S,D,J,K | 250 | 250 | 18 | 14000 | 0.043 | 1000 |
| NIN-HJ2N2_TR700F | 2.2 | S,D,K | 250 | 250 | 13 | 14000 | 0.15 | 700 |
| NIN-HJ2N7_TR1000F | 2.7 | C,S,D,J,K | 250 | 250 | 25 | 11000 | 0.043 | 1000 |
| NIN-HJ3N3_TR850F | 3.3 | C,S,D,J,K | 250 | 250 | 25 | 11000 | 0.059 | 850 |
| NIN-HJ3N6_TR850F | 3.6 | C,S,D,J,K | 250 | 250 | 25 | 10000 | 0.059 | 850 |
| NIN-HJ3N9_TR850F | 3.9 | C,S,D,J,K | 250 | 250 | 25 | 8600 | 0.059 | 850 |
| NIN-HJ4N3_TR850F | 4.3 | C,S,D,J,K | 250 | 250 | 25 | 7900 | 0.059 | 850 |
| NIN-HJ4N7_TR800F | 4.7 | C,S,D,J,K | 250 | 250 | 25 | 6100 | 0.065 | 800 |
| NIN-HJ5N1_TR600F | 5.1 | C,S,D,J,K | 250 | 250 | 21 | 6300 | 0.13 | 600 |
| NIN-HJ6N2_TR700F | 6.2 | C,S,D,J,K | 250 | 250 | 29 | 7900 | 0.095 | 700 |
| NIN-HJ6N8_TR700F | 6.8 | G,H,J,K | 250 | 250 | 29 | 7200 | 0.095 | 700 |
| NIN-HJ7N5_TR700F | 7.5 | G,H,J,K | 250 | 250 | 33 | 6200 | 0.095 | 700 |
| NIN-HJ8N2_TR700F | 8.2 | G,H,J,K | 250 | 250 | 31 | 6000 | 0.095 | 700 |
| NIN-HJ8N7_TR700F | 8.7 | G,H,J,K | 250 | 250 | 31 | 6000 | 0.095 | 700 |
| NIN-HJ9N1_TR620F | 9.1 | G,H,J,K | 250 | 250 | 30 | 6000 | 0.12 | 620 |
| NIN-HJ9N5_TR540F | 9.5 | G,H,J,K | 250 | 250 | 26 | 6000 | 0.16 | 540 |
| NIN-HJ100_TR600F | 10 | G,H,J,K | 250 | 250 | 30 | 6000 | 0.13 | 600 |
| NIN-HJ110_TR600F | 11 | G,H,J,K | 250 | 250 | 35 | 6000 | 0.13 | 600 |
| NIN-HJ120_TR600F | 12 | G,H,J,K | 250 | 250 | 35 | 6000 | 0.13 | 600 |
| NIN-HJ130_TR600F | 13 | G,H,J,K | 250 | 250 | 35 | 6000 | 0.13 | 600 |
| NIN-HJ150_TR550F | 15 | G,H,J,K | 250 | 250 | 37 | 6000 | 0.15 | 550 |
| NIN-HJ160_TR550F | 16 | G,H,J,K | 250 | 250 | 37 | 5500 | 0.15 | 550 |
| NIN-HJ170_TR550F | 17 | G,H,J,K | 250 | 250 | 37 | 5500 | 0.15 | 550 |
| NIN-HJ180_TR550F | 18 | G,H,J,K | 250 | 250 | 37 | 5500 | 0.15 | 550 |
| NIN-HJ200_TR550F | 20 | G,H,J,K | 250 | 250 | 37 | 4900 | 0.15 | 550 |
| NIN-HJ220_TR490F | 22 | G,H,J,K | 250 | 250 | 38 | 4600 | 0.19 | 490 |
| NIN-HJ230_TR490F | 23 | G,H,J,K | 250 | 250 | 40 | 3800 | 0.19 | 490 |
| NIN-HJ240_TR490F | 24 | G,H,J,K | 250 | 250 | 40 | 3800 | 0.19 | 490 |
| NIN-HJ250_TR490F | 25 | G,H,J,K | 250 | 250 | 40 | 3700 | 0.19 | 490 |
| NIN-HJ270_TR490F | 27 | G,H,J,K | 250 | 250 | 38 | 3700 | 0.19 | 490 |
| NIN-HJ300_TR470F | 30 | G,H,J,K | 250 | 250 | 38 | 3300 | 0.21 | 470 |
| NIN-HJ330_TR470F | 33 | G,H,J,K | 250 | 250 | 40 | 3200 | 0.21 | 470 |
| NIN-HJ360_TR460F | 36 | G,H,J,K | 250 | 250 | 40 | 2900 | 0.22 | 460 |
| NIN-HJ390_TR460F | 39 | G,H,J,K | 250 | 250 | 40 | 2800 | 0.22 | 460 |
| NIN-HJ430_TR400F | 43 | G,H,J,K | 250 | 250 | 40 | 2700 | 0.27 | 400 |
| NIN-HJ470_TR400F | 47 | G,H,J,K | 200 | 200 | 36 | 2600 | 0.27 | 400 |
| NIN-HJ510_TR390F | 51 | G,H,J,K | 200 | 200 | 35 | 2400 | 0.3 | 390 |
| NIN-HJ560_TR360F | 56 | G,H,J,K | 200 | 200 | 38 | 2400 | 0.35 | 360 |
| NIN-HJ620_TR350F | 62 | G,H,J,K | 200 | 200 | 36 | 2300 | 0.38 | 350 |
| NIN-HJ680_TR350F | 68 | G,H,J,K | 200 | 200 | 36 | 2200 | 0.38 | 350 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NIN-HJ SERIES

J-SIZE (0603)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|------------------|--------------------------|---------|--------------------|-----|-------------|-------------------------|----------------------------------|--------------------------|
| | | | L | Q | | | | |
| NIN-HJ720_TR320F | 72 | G,H,J,K | 150 | 150 | 34 | 2100 | 0.43 | 320 |
| NIN-HJ820_TR300F | 82 | G,H,J,K | 150 | 150 | 34 | 2000 | 0.5 | 300 |
| NIN-HJ900_TR300F | 90 | G,H,J,K | 150 | 150 | 34 | 1900 | 0.52 | 300 |
| NIN-HJ910_TR300F | 91 | G,H,J,K | 150 | 150 | 34 | 1900 | 0.52 | 300 |
| NIN-HJR10_TR260F | 100 | G,H,J,K | 150 | 150 | 31 | 1800 | 0.66 | 260 |
| NIN-HJR11_TR250F | 110 | G,H,J,K | 150 | 150 | 32 | 1700 | 0.73 | 250 |
| NIN-HJR12_TR240F | 120 | G,H,J,K | 150 | 150 | 32 | 1600 | 0.75 | 240 |
| NIN-HJR13_TR240F | 130 | G,H,J,K | 150 | 150 | 32 | 1500 | 0.75 | 240 |
| NIN-HJR14_TR200F | 140 | G,H,J,K | 150 | 150 | 32 | 1400 | 1.1 | 200 |
| NIN-HJR15_TR200F | 150 | G,H,J,K | 150 | 150 | 32 | 1400 | 1.12 | 200 |
| NIN-HJR16_TR200F | 160 | G,H,J,K | 150 | 150 | 32 | 1400 | 1.12 | 200 |
| NIN-HJR18_TR180F | 180 | G,H,J,K | 100 | 100 | 25 | 1300 | 1.38 | 180 |
| NIN-HJR20_TR150F | 200 | G,H,J,K | 100 | 100 | 25 | 1250 | 1.9 | 150 |
| NIN-HJR21_TR150F | 210 | G,H,J,K | 100 | 100 | 25 | 1250 | 1.9 | 150 |
| NIN-HJR22_TR140F | 220 | G,H,J,K | 100 | 100 | 25 | 1200 | 2.1 | 140 |
| NIN-HJR24_TR120F | 240 | G,H,J,K | 100 | 100 | 25 | 1100 | 2.75 | 120 |
| NIN-HJR25_TR120F | 250 | G,H,J,K | 100 | 100 | 25 | 1100 | 2.8 | 120 |
| NIN-HJR27_TR120F | 270 | G,H,J,K | 100 | 100 | 26 | 960 | 3 | 120 |
| NIN-HJR30_TR110F | 300 | G,H,J,K | 100 | 100 | 26 | 900 | 4.05 | 110 |
| NIN-HJR33_TR100F | 330 | G,H,J,K | 100 | 100 | 26 | 800 | 4.2 | 100 |
| NIN-HJR39_TR100F | 390 | G,H,J,K | 100 | 100 | 27 | 800 | 4.5 | 100 |
| NIN-HJR42_TR90F | 420 | G,H,J,K | 100 | 100 | 27 | 800 | 5.4 | 90 |
| NIN-HJR47_TR90F | 470 | G,H,J,K | 100 | 100 | 27 | 700 | 5.7 | 90 |
| NIN-HJR56_TR70F | 560 | G,H,J,K | 100 | 100 | 27 | 650 | 8.1 | 70 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NIN-HJ SERIES

J-SIZE (0603)

"M" EXTENDED PERFORMANCE

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|--------------------|--------------------------|-------|--------------------|-----|-------------|-------------------------|----------------------------------|--------------------------|
| | | | L | Q | | | | |
| NIN-HJ2N2_MTR700F | 2.2 | C,D | 100 | 250 | 16 | 6000 | 0.049 | 700 |
| NIN-HJ2N2_MTR1400F | 2.2 | C,D | 100 | 250 | 18 | >6000 | 0.018 | 1400 |
| NIN-HJ3N6_MTR850F | 3.6 | C,D | 100 | 250 | 25 | 6000 | 0.059 | 850 |
| NIN-HJ3N9_MTR850F | 3.9 | C,D | 100 | 250 | 35 | 6000 | 0.059 | 850 |
| NIN-HJ3N9_MTR1000F | 3.9 | C,D | 100 | 250 | 38 | >6000 | 0.032 | 1000 |
| NIN-HJ4N3_MTR850F | 4.3 | C,D | 100 | 250 | 35 | 6000 | 0.059 | 850 |
| NIN-HJ4N5_MTR850F | 4.5 | C,D | 100 | 250 | 35 | 6000 | 0.059 | 850 |
| NIN-HJ4N7_MTR850F | 4.7 | C,D | 100 | 250 | 35 | 6000 | 0.059 | 850 |
| NIN-HJ5N6_MTR750F | 5.6 | C,D | 100 | 250 | 35 | 6000 | 0.082 | 750 |
| NIN-HJ5N6_MTR900F | 5.6 | C,D | 100 | 250 | 38 | >6000 | 0.045 | 900 |
| NIN-HJ6N2_MTR750F | 6.2 | C,D | 100 | 250 | 35 | 6000 | 0.082 | 750 |
| NIN-HJ6N8_MTR750F | 6.8 | C,D | 100 | 250 | 35 | 6000 | 0.082 | 750 |
| NIN-HJ6N8_MTR900F | 6.8 | C,D | 100 | 250 | 38 | >6000 | 0.045 | 900 |
| NIN-HJ7N5_MTR750F | 7.5 | C,D | 100 | 250 | 35 | 6000 | 0.082 | 750 |
| NIN-HJ8N2_MTR650F | 8.2 | C,D | 100 | 250 | 35 | 6000 | 0.11 | 650 |
| NIN-HJ8N2_MTR800F | 8.2 | S,D | 100 | 250 | 38 | >6000 | 0.058 | 800 |
| NIN-HJ8N7_MTR650F | 8.7 | C,D | 100 | 250 | 35 | 6000 | 0.11 | 650 |
| NIN-HJ9N1_MTR650F | 9.1 | C,D | 100 | 250 | 35 | 6000 | 0.11 | 650 |
| NIN-HJ9N5_MTR650F | 9.5 | C,D | 100 | 250 | 35 | 6000 | 0.11 | 650 |
| NIN-HJ100_MTR650F | 10 | G,H,J | 100 | 250 | 35 | 6000 | 0.11 | 650 |
| NIN-HJ100_MTR800F | 10 | G,H,J | 100 | 250 | 38 | 5000 | 0.07 | 800 |
| NIN-HJ110_MTR650F | 11 | G,H,J | 100 | 250 | 35 | 6000 | 0.11 | 650 |
| NIN-HJ120_MTR600F | 12 | G,H,J | 100 | 250 | 35 | 6000 | 0.13 | 600 |
| NIN-HJ120_MTR750F | 12 | G,H,J | 100 | 250 | 38 | 5000 | 0.071 | 750 |
| NIN-HJ130_MTR600F | 13 | G,H,J | 100 | 250 | 35 | 6000 | 0.13 | 600 |
| NIN-HJ150_MTR600F | 15 | G,H,J | 100 | 250 | 40 | 6000 | 0.13 | 600 |
| NIN-HJ150_MTR700F | 15 | G,H,J | 100 | 250 | 42 | 4500 | 0.085 | 700 |
| NIN-HJ160_MTR550F | 16 | G,H,J | 100 | 250 | 40 | 5500 | 0.16 | 550 |
| NIN-HJ180_MTR550F | 18 | G,H,J | 100 | 250 | 40 | 5500 | 0.16 | 550 |
| NIN-HJ180_MTR700F | 18 | G,H,J | 100 | 250 | 42 | 3500 | 0.085 | 700 |
| NIN-HJ200_MTR550F | 20 | G,H,J | 100 | 250 | 40 | 4900 | 0.16 | 550 |
| NIN-HJ220_MTR500F | 22 | G,H,J | 100 | 250 | 40 | 4600 | 0.17 | 500 |
| NIN-HJ220_MTR640F | 22 | G,H,J | 100 | 250 | 42 | 3200 | 0.099 | 640 |
| NIN-HJ240_MTR500F | 24 | G,H,J | 100 | 250 | 40 | 3800 | 0.21 | 500 |
| NIN-HJ270_MTR440F | 27 | G,H,J | 100 | 250 | 40 | 3700 | 0.21 | 440 |
| NIN-HJ270_MTR590F | 27 | G,H,J | 100 | 250 | 42 | 2800 | 0.116 | 590 |
| NIN-HJ300_MTR420F | 30 | G,H,J | 100 | 250 | 40 | 3300 | 0.23 | 420 |
| NIN-HJ330_MTR420F | 33 | G,H,J | 100 | 250 | 40 | 3200 | 0.23 | 420 |
| NIN-HJ330_MTR550F | 33 | J | 100 | 250 | 42 | 2500 | 0.132 | 550 |
| NIN-HJ360_MTR400F | 36 | G,H,J | 100 | 250 | 40 | 2900 | 0.26 | 400 |
| NIN-HJ390_MTR400F | 39 | G,H,J | 100 | 250 | 40 | 2800 | 0.26 | 400 |
| NIN-HJ430_MTR380F | 43 | G,H,J | 100 | 200 | 40 | 2700 | 0.29 | 380 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.



Wirewound Chip Inductors

NIN-HJ SERIES

J-SIZE (0603)

"M" EXTENDED PERFORMANCE

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|-------------------|-----------------------|-------|-----------------|-----|----------|-------------------|----------------------------|-----------------------|
| | | | L | Q | | | | |
| NIN-HJ470_MTR380F | 47 | G,H,J | 100 | 200 | 38 | 2600 | 0.29 | 380 |
| NIN-HJ510_MTR370F | 51 | G,H,J | 100 | 200 | 38 | 2500 | 0.33 | 370 |
| NIN-HJ560_MTR360F | 56 | G,H,J | 100 | 200 | 38 | 2400 | 0.35 | 360 |
| NIN-HJ620_MTR280F | 62 | G,H,J | 100 | 200 | 38 | 2300 | 0.51 | 280 |
| NIN-HJ680_MTR340F | 68 | G,H,J | 100 | 200 | 38 | 2200 | 0.38 | 340 |
| NIN-HJ720_MTR270F | 72 | G,H,J | 100 | 150 | 34 | 2100 | 0.56 | 270 |
| NIN-HJ750_MTR270F | 75 | G,H,J | 100 | 150 | 34 | 2050 | 0.56 | 270 |
| NIN-HJ820_MTR250F | 82 | G,H,J | 100 | 150 | 34 | 2000 | 0.6 | 250 |
| NIN-HJ910_MTR230F | 91 | G,H,J | 100 | 150 | 34 | 1900 | 0.64 | 230 |
| NIN-HJR10_MTR220F | 100 | G,H,J | 100 | 150 | 34 | 1800 | 0.68 | 220 |
| NIN-HJR11_MTR200F | 110 | G,H,J | 100 | 150 | 32 | 1700 | 1.2 | 200 |
| NIN-HJR12_MTR180F | 120 | G,H,J | 100 | 150 | 32 | 1600 | 1.3 | 180 |
| NIN-HJR13_MTR170F | 130 | G,H,J | 100 | 150 | 32 | 1450 | 1.4 | 170 |
| NIN-HJR15_MTR160F | 150 | G,H,J | 100 | 150 | 32 | 1400 | 1.5 | 160 |
| NIN-HJR16_MTR150F | 160 | G,H,J | 100 | 150 | 32 | 1350 | 2.1 | 150 |
| NIN-HJR18_MTR140F | 180 | G,H,J | 100 | 100 | 25 | 1300 | 2.2 | 140 |
| NIN-HJR20_MTR120F | 200 | G,H,J | 100 | 100 | 25 | 1250 | 2.4 | 120 |
| NIN-HJR22_MTR120F | 220 | G,H,J | 100 | 100 | 25 | 1200 | 2.5 | 120 |
| NIN-HJR27_MTR110F | 270 | G,H,J | 100 | 100 | 30 | 960 | 3.4 | 110 |
| NIN-HJR33_MTR85F | 330 | G,H,J | 100 | 100 | 30 | 800 | 5.5 | 85 |
| NIN-HJR39_MTR80F | 390 | G,H,J | 100 | 100 | 30 | 800 | 6.2 | 80 |
| NIN-HJR47_MTR75F | 470 | G,H,J | 100 | 100 | 30 | 700 | 7 | 75 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.



NIN-HD SERIES

D-SIZE (0805)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|------------------|-----------------------|---------|-----------------|------|----------|-------------------|----------------------------|-----------------------|
| | | | L | Q | | | | |
| NIN-HD2N2_TR600F | 2.2 | G,H,J,K | 250 | 1500 | 40 | 12200 | 0.1 | 600 |
| NIN-HD3N3_TR600F | 3.3 | G,H,J,K | 250 | 1500 | 25 | 12200 | 0.2 | 600 |
| NIN-HD6N8_TR600F | 6.8 | G,H,J,K | 250 | 1000 | 40 | 5000 | 0.11 | 600 |
| NIN-HD8N2_TR600F | 8.2 | G,H,J,K | 250 | 1000 | 40 | 4600 | 0.19 | 600 |
| NIN-HD120_TR600F | 12 | G,H,J,K | 250 | 500 | 40 | 4000 | 0.15 | 600 |
| NIN-HD150_TR600F | 15 | G,H,J,K | 250 | 500 | 40 | 2900 | 0.17 | 600 |
| NIN-HD180_TR600F | 18 | G,H,J,K | 250 | 500 | 50 | 3300 | 0.2 | 600 |
| NIN-HD220_TR500F | 22 | G,H,J,K | 250 | 500 | 55 | 2000 | 0.22 | 500 |
| NIN-HD270_TR500F | 27 | G,H,J,K | 250 | 500 | 55 | 2500 | 0.25 | 500 |
| NIN-HD330_TR500F | 33 | G,H,J,K | 250 | 500 | 60 | 2000 | 0.27 | 500 |
| NIN-HD390_TR500F | 39 | G,H,J,K | 250 | 500 | 60 | 2000 | 0.29 | 500 |
| NIN-HD470_TR500F | 47 | G,H,J,K | 200 | 500 | 50 | 1600 | 0.31 | 500 |
| NIN-HD560_TR500F | 56 | G,H,J,K | 200 | 500 | 55 | 1550 | 0.32 | 500 |
| NIN-HD680_TR500F | 68 | G,H,J,K | 200 | 500 | 55 | 1450 | 0.38 | 500 |
| NIN-HD820_TR400F | 82 | G,H,J,K | 150 | 500 | 50 | 1300 | 0.42 | 400 |
| NIN-HDR10_TR400F | 100 | G,H,J,K | 150 | 500 | 50 | 1200 | 0.46 | 400 |
| NIN-HDR12_TR400F | 120 | G,H,J,K | 150 | 250 | 50 | 1100 | 0.51 | 400 |
| NIN-HDR15_TR400F | 150 | G,H,J,K | 100 | 250 | 50 | 920 | 0.56 | 400 |
| NIN-HDR18_TR400F | 180 | G,H,J,K | 100 | 250 | 50 | 870 | 0.64 | 400 |
| NIN-HDR22_TR400F | 220 | G,H,J,K | 100 | 250 | 45 | 850 | 1.1 | 400 |
| NIN-HDR27_TR350F | 270 | G,H,J,K | 100 | 250 | 38 | 650 | 1 | 350 |
| NIN-HDR33_TR310F | 330 | G,H,J,K | 100 | 250 | 40 | 600 | 1.4 | 310 |
| NIN-HDR39_TR290F | 390 | G,H,J,K | 100 | 250 | 35 | 560 | 1.5 | 290 |
| NIN-HDR47_TR250F | 470 | G,H,J,K | 50 | 100 | 33 | 375 | 1.72 | 250 |
| NIN-HDR56_TR230F | 560 | G,H,J,K | 25 | 50 | 23 | 320 | 1.9 | 230 |
| NIN-HDR62_TR200F | 620 | G,H,J,K | 25 | 50 | 23 | 280 | 1.95 | 200 |
| NIN-HDR68_TR190F | 680 | G,H,J,K | 25 | 50 | 23 | 270 | 2.05 | 190 |
| NIN-HDR75_TR180F | 750 | G,H,J,K | 25 | 50 | 23 | 240 | 2.1 | 180 |
| NIN-HDR82_TR180F | 820 | G,H,J,K | 25 | 50 | 23 | 250 | 2.3 | 180 |
| NIN-HDR91_TR160F | 910 | G,H,J,K | 25 | 50 | 22 | 230 | 2.4 | 160 |
| NIN-HD1R0_TR150F | 1000 | G,H,J,K | 25 | 50 | 20 | 200 | 2.5 | 150 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NIN-HC SERIES **C-SIZE (1008)** **STANDARD VALUES**

| NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|-------------------|-----------------------|---------|-----------------|------|----------|-------------------|----------------------------|-----------------------|
| | | | L | Q | | | | |
| NIN-HC4N7_TR1000F | 4.7 | G,H,J,K | 50 | 1500 | 50 | 7900 | 0.11 | 1000 |
| NIN-HC100_TR1000F | 10 | G,H,J,K | 50 | 500 | 50 | 4100 | 0.08 | 1000 |
| NIN-HC120_TR1000F | 12 | G,H,J,K | 50 | 500 | 50 | 3300 | 0.09 | 1000 |
| NIN-HC150_TR1000F | 15 | G,H,J,K | 50 | 500 | 50 | 2500 | 0.13 | 1000 |
| NIN-HC180_TR1000F | 18 | G,H,J,K | 50 | 350 | 50 | 2500 | 0.11 | 1000 |
| NIN-HC220_TR1000F | 22 | G,H,J,K | 50 | 350 | 55 | 2400 | 0.12 | 1000 |
| NIN-HC270_TR1000F | 27 | G,H,J,K | 50 | 350 | 55 | 1600 | 0.13 | 1000 |
| NIN-HC330_TR1000F | 33 | G,H,J,K | 50 | 350 | 60 | 1600 | 0.14 | 1000 |
| NIN-HC390_TR1000F | 39 | G,H,J,K | 50 | 350 | 50 | 1500 | 0.15 | 1000 |
| NIN-HC470_TR1000F | 47 | G,H,J,K | 50 | 350 | 65 | 1500 | 0.16 | 1000 |
| NIN-HC560_TR1000F | 56 | G,H,J,K | 50 | 350 | 50 | 1300 | 0.18 | 1000 |
| NIN-HC680_TR1000F | 68 | G,H,J,K | 50 | 350 | 65 | 1200 | 0.21 | 1000 |
| NIN-HC820_TR1000F | 82 | G,H,J,K | 50 | 350 | 60 | 800 | 0.22 | 1000 |
| NIN-HCR10_TR650F | 100 | G,H,J,K | 25 | 350 | 60 | 1000 | 0.56 | 650 |
| NIN-HCR12_TR650F | 120 | G,H,J,K | 25 | 350 | 60 | 950 | 0.63 | 650 |
| NIN-HCR15_TR580F | 150 | G,H,J,K | 25 | 100 | 50 | 800 | 0.62 | 580 |
| NIN-HCR18_TR620F | 180 | G,H,J,K | 25 | 100 | 50 | 750 | 0.7 | 620 |
| NIN-HCR22_TR500F | 220 | G,H,J,K | 25 | 100 | 50 | 630 | 0.8 | 500 |
| NIN-HCR27_TR500F | 270 | G,H,J,K | 25 | 100 | 50 | 600 | 0.91 | 500 |
| NIN-HCR33_TR450F | 330 | G,H,J,K | 25 | 100 | 50 | 530 | 1.05 | 450 |
| NIN-HCR39_TR470F | 390 | G,H,J,K | 25 | 100 | 50 | 480 | 1.12 | 470 |
| NIN-HCR47_TR470F | 470 | G,H,J,K | 25 | 100 | 50 | 450 | 1.19 | 470 |
| NIN-HCR56_TR400F | 560 | G,H,J,K | 25 | 100 | 50 | 390 | 1.33 | 400 |
| NIN-HCR62_TR300F | 620 | G,H,J,K | 25 | 100 | 45 | 375 | 1.4 | 300 |
| NIN-HCR68_TR400F | 680 | G,H,J,K | 25 | 100 | 45 | 360 | 1.47 | 400 |
| NIN-HCR75_TR360F | 750 | G,H,J,K | 25 | 100 | 45 | 360 | 1.54 | 360 |
| NIN-HCR82_TR400F | 820 | G,H,J,K | 25 | 100 | 45 | 330 | 1.61 | 400 |
| NIN-HCR91_TR380F | 910 | G,H,J,K | 25 | 50 | 35 | 295 | 1.68 | 380 |
| NIN-HC1R0_TR370F | 1000 | G,H,J,K | 25 | 50 | 35 | 270 | 1.8 | 370 |
| NIN-HC1R2_TR310F | 1200 | G,H,J,K | 7.9 | 50 | 35 | 200 | 2 | 310 |
| NIN-HC1R5_TR330F | 1500 | G,H,J,K | 7.9 | 50 | 28 | 150 | 2.3 | 330 |
| NIN-HC1R8_TR300F | 1800 | G,H,J,K | 7.9 | 50 | 28 | 120 | 2.6 | 300 |
| NIN-HC2R2_TR280F | 2200 | G,H,J,K | 7.9 | 50 | 28 | 100 | 2.8 | 280 |
| NIN-HC2R7_TR290F | 2700 | G,H,J,K | 7.9 | 25 | 22 | 90 | 3.2 | 290 |
| NIN-HC3R3_TR290F | 3300 | G,H,J,K | 7.9 | 25 | 22 | 70 | 3.4 | 290 |
| NIN-HC3R9_TR260F | 3900 | G,H,J,K | 7.9 | 25 | 17 | 60 | 3.6 | 260 |
| NIN-HC4R7_TR260F | 4700 | G,H,J,K | 7.9 | 25 | 20 | 50 | 4 | 260 |
| NIN-HC5R6_TR240F | 5600 | G,H,J,K | 7.9 | 25 | 20 | 40 | 5.7 | 240 |
| NIN-HC6R8_TR200F | 6800 | G,H,J,K | 7.9 | 25 | 20 | 40 | 7.7 | 200 |
| NIN-HC8R2_TR150F | 8200 | G,H,J,K | 7.9 | 25 | 20 | 30 | 10.7 | 150 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.



NIN-HE SERIES

E-SIZE (1206)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (nH) | INDUCTANCE TOLERANCE | FREQUENCY L/Q(MHz) | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|---------------|-----------------------|----------------------|--------------------|-----------|-------------------|----------------------------|-----------------------|
| NIN-HE3N3_TRF | 3.3 | G, J, K | 100/300 | 20@300MHz | 6200 | 0.07 | 1000 |
| NIN-HE6N8_TRF | 6.8 | G, J, K | 100/300 | 30@300MHz | 5500 | 0.07 | 1000 |
| NIN-HE100_TRF | 10 | G, J, K | 100/300 | 40@300MHz | 4000 | 0.09 | 1000 |
| NIN-HE120_TRF | 12 | G, J, K | 100/300 | 40@300MHz | 3200 | 0.09 | 1000 |
| NIN-HE150_TRF | 15 | G, J, K | 100/300 | 40@300MHz | 3200 | 0.12 | 1000 |
| NIN-HE180_TRF | 18 | G, J, K | 100/300 | 45@300MHz | 2800 | 0.12 | 1000 |
| NIN-HE220_TRF | 22 | G, J, K | 100/300 | 50@300MHz | 2200 | 0.12 | 1000 |
| NIN-HE270_TRF | 27 | G, J, K | 100/300 | 50@300MHz | 1800 | 0.12 | 1000 |
| NIN-HE330_TRF | 33 | G, J, K | 100/300 | 50@300MHz | 1800 | 0.12 | 1000 |
| NIN-HE390_TRF | 39 | G, J, K | 100/300 | 50@300MHz | 1800 | 0.12 | 1000 |
| NIN-HE470_TRF | 47 | G, J, K | 100/300 | 50@300MHz | 1500 | 0.13 | 1000 |
| NIN-HE560_TRF | 56 | G, J, K | 100/300 | 55@300MHz | 1450 | 0.14 | 1000 |
| NIN-HE680_TRF | 68 | G, J, K | 100/300 | 55@300MHz | 1200 | 0.26 | 900 |
| NIN-HE820_TRF | 82 | G, J, K | 100/300 | 55@300MHz | 1200 | 0.21 | 900 |
| NIN-HER10_TRF | 100 | G, J, K | 100/300 | 55@300MHz | 1100 | 0.3 | 850 |
| NIN-HER12_TRF | 120 | G, J, K | 100/300 | 60@300MHz | 1100 | 0.3 | 800 |
| NIN-HER15_TRF | 150 | G, J, K | 100/300 | 55@300MHz | 950 | 0.31 | 750 |
| NIN-HER18_TRF | 180 | G, J, K | 50/300 | 60@300MHz | 900 | 0.43 | 700 |
| NIN-HER22_TRF | 220 | G, J, K | 50/300 | 60@300MHz | 760 | 0.56 | 670 |
| NIN-HER27_TRF | 270 | G, J, K | 50/300 | 50@300MHz | 730 | 0.56 | 630 |
| NIN-HER33_TRF | 330 | G, J, K | 50/150 | 45@150MHz | 650 | 0.7 | 590 |
| NIN-HER39_TRF | 390 | G, J, K | 50/150 | 45@150MHz | 600 | 0.8 | 530 |
| NIN-HER47_TRF | 470 | G, J, K | 50/150 | 45@150MHz | 550 | 1.3 | 490 |
| NIN-HER56_TRF | 560 | G, J, K | 35/150 | 45@150MHz | 470 | 1.34 | 460 |
| NIN-HER68_TRF | 680 | G, J, K | 35/150 | 45@150MHz | 450 | 1.58 | 430 |
| NIN-HER82_TRF | 820 | G, J, K | 35/150 | 45@150MHz | 420 | 1.82 | 400 |
| NIN-HE1R0_TRF | 1000 | G, J, K | 35/150 | 45@150MHz | 400 | 2.8 | 320 |
| NIN-HE1R2_TRF | 1200 | G, J, K | 35/150 | 45@150MHz | 380 | 3.2 | 300 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NIN-HA SERIES

A-SIZE (1210)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (nH) | INDUCTANCE TOLERANCE | FREQUENCY L/Q(MHz) | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|---------------|-----------------------|----------------------|--------------------|-----------|-------------------|----------------------------|-----------------------|
| NIN-HA3N9_TRF | 3.9 | G, J, K | 100/300 | 30@300MHz | 6000 | 0.05 | 1000 |
| NIN-HA4N7_TRF | 4.7 | G, J, K | 100/300 | 30@300MHz | 5800 | 0.065 | 1000 |
| NIN-HA8N2_TRF | 8.2 | G, J, K | 100/300 | 30@300MHz | 5500 | 0.07 | 1000 |
| NIN-HA100_TRF | 10 | G, J, K | 100/300 | 40@300MHz | 4000 | 0.08 | 1000 |
| NIN-HA120_TRF | 12 | G, J, K | 100/300 | 40@300MHz | 3200 | 0.08 | 1000 |
| NIN-HA150_TRF | 15 | G, J, K | 100/300 | 40@300MHz | 3200 | 0.1 | 1000 |
| NIN-HA180_TRF | 18 | G, J, K | 100/300 | 50@300MHz | 2800 | 0.1 | 1000 |
| NIN-HA220_TRF | 22 | G, J, K | 100/300 | 50@300MHz | 2200 | 0.1 | 1000 |
| NIN-HA270_TRF | 27 | G, J, K | 100/300 | 50@300MHz | 1800 | 0.11 | 1000 |
| NIN-HA330_TRF | 33 | G, J, K | 100/300 | 55@300MHz | 1800 | 0.11 | 1000 |
| NIN-HA390_TRF | 39 | G, J, K | 100/300 | 55@300MHz | 1500 | 0.12 | 1000 |
| NIN-HA430_TRF | 43 | G, J, K | 100/300 | 55@300MHz | 1500 | 0.12 | 1000 |
| NIN-HA470_TRF | 47 | G, J, K | 100/300 | 55@300MHz | 1500 | 0.13 | 1000 |
| NIN-HA560_TRF | 56 | G, J, K | 100/300 | 55@300MHz | 1450 | 0.14 | 1000 |
| NIN-HA680_TRF | 68 | G, J, K | 100/300 | 55@300MHz | 1200 | 0.15 | 900 |
| NIN-HA820_TRF | 82 | G, J, K | 100/300 | 55@300MHz | 1000 | 0.2 | 900 |
| NIN-HAR10_TRF | 100 | G, J, K | 100/300 | 55@300MHz | 900 | 0.2 | 850 |
| NIN-HAR12_TRF | 120 | G, J, K | 100/300 | 60@300MHz | 800 | 0.25 | 800 |
| NIN-HAR15_TRF | 150 | G, J, K | 100/300 | 60@300MHz | 700 | 0.25 | 750 |
| NIN-HAR18_TRF | 180 | G, J, K | 50/300 | 60@300MHz | 650 | 0.3 | 700 |
| NIN-HAR22_TRF | 220 | G, J, K | 50/300 | 60@300MHz | 650 | 0.4 | 770 |
| NIN-HAR27_TRF | 270 | G, J, K | 50/300 | 40@300MHz | 580 | 0.4 | 630 |
| NIN-HAR33_TRF | 330 | G, J, K | 50/150 | 45@150MHz | 580 | 0.58 | 590 |
| NIN-HAR39_TRF | 390 | G, J, K | 50/150 | 45@150MHz | 510 | 0.58 | 530 |
| NIN-HAR47_TRF | 470 | G, J, K | 50/150 | 45@150MHz | 480 | 0.8 | 490 |
| NIN-HAR56_TRF | 560 | G, J, K | 35/150 | 45@150MHz | 420 | 1.1 | 460 |
| NIN-HAR68_TRF | 680 | G, J, K | 35/150 | 45@150MHz | 400 | 1.2 | 430 |
| NIN-HAR82_TRF | 820 | G, J, K | 35/150 | 45@150MHz | 370 | 1.82 | 400 |
| NIN-HA1R0_TRF | 1000 | G, J, K | 35/150 | 45@150MHz | 340 | 1.85 | 320 |
| NIN-HA1R2_TRF | 1200 | G, J, K | 35/150 | 35@150MHz | 220 | 1.87 | 300 |
| NIN-HA1R5_TRF | 1500 | G, J, K | 7.9/50 | 20@50MHz | 160 | 1.95 | 310 |
| NIN-HA1R8_TRF | 1800 | G, J, K | 7.9/50 | 30@50MHz | 160 | 2.25 | 310 |
| NIN-HA2R2_TRF | 2200 | G, J, K | 7.9/50 | 25@50MHz | 130 | 2.41 | 310 |
| NIN-HA2R7_TRF | 2700 | G, J, K | 7.9/50 | 25@50MHz | 110 | 2.85 | 300 |
| NIN-HA3R0_TRF | 3000 | G, J, K | 7.9/25 | 20@25MHz | 110 | 3.12 | 300 |
| NIN-HA3R9_TRF | 3900 | G, J, K | 7.9/25 | 20@25MHz | 60 | 3.6 | 290 |
| NIN-HA4R7_TRF | 4700 | G, J, K | 7.9/25 | 20@25MHz | 60 | 4 | 280 |
| NIN-HA5R6_TRF | 5600 | G, J, K | 7.9/25 | 15@25MHz | 50 | 5 | 250 |
| NIN-HA6R8_TRF | 6800 | G, J, K | 7.9 | 15@7.9MHz | 40 | 8 | 230 |
| NIN-HA8R6_TRF | 8600 | G, J, K | 7.9 | 15@7.9MHz | 40 | 9 | 200 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NIN-HB SERIES

D-SIZE (1812)

STANDARD VALUES

| NIC P/N | INDUCTANCE VALUE (μ H) | INDUCTANCE TOLERANCE | FREQUENCY L/Q(MHz) | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|---------------|-----------------------------|----------------------|--------------------|----------|-------------------|----------------------------|-----------------------|
| NIN-HB1R0_TRF | 1 | G, J, K | 7.9/50 | 60@50MHz | 250 | 1.2 | 480 |
| NIN-HB1R2_TRF | 1.2 | G, J, K | 7.9/50 | 60@50MHz | 230 | 1.2 | 480 |
| NIN-HB1R5_TRF | 1.5 | G, J, K | 7.9/50 | 60@50MHz | 210 | 1.6 | 430 |
| NIN-HB1R8_TRF | 1.8 | G, J, K | 7.9/50 | 55@50MHz | 150 | 2 | 380 |
| NIN-HB2R2_TRF | 2.2 | G, J, K | 7.9/50 | 55@50MHz | 150 | 2.2 | 340 |
| NIN-HB2R7_TRF | 2.7 | G, J, K | 7.9/50 | 55@50MHz | 150 | 3.2 | 300 |
| NIN-HB3R3_TRF | 3.3 | G, J, K | 7.9/50 | 55@50MHz | 130 | 3.8 | 270 |
| NIN-HB3R9_TRF | 3.9 | G, J, K | 7.9/50 | 55@50MHz | 120 | 5 | 240 |
| NIN-HB4R7_TRF | 4.7 | G, J, K | 7.9/50 | 55@50MHz | 90 | 5.4 | 230 |
| NIN-HB5R6_TRF | 5.6 | G, J, K | 7.9/50 | 45@50MHz | 90 | 5.7 | 220 |
| NIN-HB6R8_TRF | 6.8 | G, J, K | 7.9/50 | 30@50MHz | 80 | 6.6 | 210 |
| NIN-HB8R2_TRF | 8.2 | G, J, K | 7.9/50 | 20@50MHz | 70 | 7 | 200 |
| NIN-HB100_TRF | 10 | G, J, K | 7.9/50 | 15@50MHz | 60 | 7.7 | 190 |
| NIN-HB120_TRF | 12 | G, J, K | 2.5/10 | 30@10MHz | 50 | 8.7 | 180 |
| NIN-HB150_TRF | 15 | G, J, K | 2.5/10 | 30@10MHz | 30 | 9.6 | 170 |
| NIN-HB180_TRF | 18 | G, J, K | 2.5/10 | 25@10MHz | 30 | 10.5 | 160 |
| NIN-HB220_TRF | 22 | G, J, K | 2.5/10 | 25@10MHz | 20 | 11.5 | 155 |
| NIN-HB270_TRF | 27 | G, J, K | 2.5/10 | 25@10MHz | 20 | 12.5 | 150 |
| NIN-HB330_TRF | 33 | G, J, K | 2.5/10 | 10@10MHz | 10 | 13.5 | 145 |

Note: Extended values, tolerances, and enhanced versions are available please contact NIC for more details.

NIN-H Legacy Part Numbers - The following parts are supported but not recommended for new designs

| Size | NIC P/N | INDUCTANCE VALUE (nH) | TOL. | FREQUENCY (MHz) | | Q FACTOR | SRF (MHz) Minimum | Rated DC Resistance (ohms) | Rated DC Current (mA) |
|---------------|---------------|-----------------------|---------|-----------------|-----|----------|-------------------|----------------------------|-----------------------|
| | | | | L | Q | | | | |
| K-SIZE (0402) | NIN-HK2N0STRF | 2 | S | 250 | 250 | 19 | 7000 | 0.084 | 1040 |
| | NIN-HK2N7STRF | 2.7 | S | 250 | 250 | 19 | 7000 | 0.095 | 840 |
| | NIN-HK5N6JTRF | 5.6 | J | 250 | 250 | 20 | 4700 | 0.099 | 760 |
| | NIN-HK6N8JTRF | 6.8 | J | 250 | 250 | 20 | 4800 | 0.099 | 680 |
| | NIN-HK150JTRF | 15 | J | 250 | 250 | 24 | 3300 | 0.204 | 560 |
| | NIN-HK220JTRF | 22 | J | 250 | 250 | 24 | 2800 | 0.36 | 400 |
| | NIN-HK680JTRF | 68 | J | 200 | 250 | 22 | 1600 | 0.912 | 150 |
| J-SIZE (0603) | NIN-HJ150_TRF | 15 | G,J,K,M | 250 | 250 | 30 | 4000 | 0.19 | 700 |
| | NIN-HJ180_TRF | 18 | G,J,K,M | 250 | 250 | 30 | 3100 | 0.2 | 700 |
| | NIN-HJ270_TRF | 27 | G,J,K,M | 250 | 250 | 35 | 2800 | 0.2 | 600 |
| | NIN-HJ330_TRF | 33 | G,J,K,M | 250 | 250 | 35 | 2300 | 0.22 | 600 |
| | NIN-HJ390_TRF | 39 | G,J,K,M | 250 | 250 | 35 | 2200 | 0.25 | 600 |
| | NIN-HJ560_TRF | 56 | G,J,K,M | 200 | 250 | 35 | 1900 | 0.38 | 600 |
| | NIN-HJ680_TRF | 68 | G,J,K,M | 200 | 250 | 35 | 1700 | 0.46 | 600 |
| | NIN-HJ820_TRF | 82 | G,J,K,M | 150 | 250 | 34 | 1700 | 0.46 | 400 |
| | NIN-HJR12_TRF | 120 | G,J,K,M | 150 | 250 | 32 | 1300 | 0.82 | 300 |
| | NIN-HJR15_TRF | 150 | G,J,K,M | 150 | 150 | 28 | 990 | 1 | 280 |
| | NIN-HJR18_TRF | 180 | G,J,K,M | 100 | 100 | 25 | 990 | 1.2 | 240 |
| | NIN-HJR22_TRF | 220 | G,J,K,M | 100 | 100 | 25 | 990 | 2 | 200 |
| D-SIZE (0805) | NIN-HD330_TRF | 33 | G,J,K,M | 250 | 500 | 60 | 2050 | 0.27 | 500 |
| | NIN-HD560_TRF | 56 | G,J,K,M | 200 | 500 | 60 | 1550 | 0.34 | 500 |
| | NIN-HDR10_TRF | 100 | G,J,K,M | 150 | 500 | 60 | 1200 | 0.46 | 400 |
| | NIN-HDR15_TRF | 150 | G,J,K,M | 100 | 250 | 50 | 920 | 0.56 | 400 |
| | NIN-HDR22_TRF | 220 | G,J,K,M | 100 | 250 | 45 | 850 | 0.7 | 400 |
| | NIN-HDR33_TRF | 330 | G,J,K,M | 100 | 250 | 40 | 600 | 1.5 | 310 |
| | NIN-HDR47_TRF | 470 | G,J,K,M | 50 | 100 | 33 | 375 | 1.76 | 250 |
| | NIN-HDR68_TRF | 680 | G,J,K,M | 25 | 50 | 23 | 188 | 2.2 | 190 |
| | NIN-HDR82_TRF | 820 | G,J,K,M | 25 | 50 | 23 | 215 | 2.35 | 180 |
| C-SIZE (1008) | NIN-HC120_TRF | 12 | J,K,M | 50 | 500 | 50 | 3300 | 0.09 | 1000 |
| | NIN-HC330_TRF | 33 | G,J,K,M | 50 | 350 | 60 | 1600 | 0.14 | 1000 |
| | NIN-HC390_TRF | 39 | G,J,K,M | 50 | 350 | 60 | 1500 | 0.15 | 1000 |
| | NIN-HC470_TRF | 47 | G,J,K,M | 50 | 350 | 65 | 1500 | 0.16 | 1000 |
| | NIN-HC680_TRF | 68 | G,J,K | 50 | 350 | 65 | 1300 | 0.2 | 1000 |
| | NIN-HC820_TRF | 82 | G,J,K | 50 | 350 | 60 | 1000 | 0.22 | 1000 |
| | NIN-HCR12_TRF | 120 | G,J,K | 25 | 350 | 60 | 950 | 0.63 | 650 |
| | NIN-HCR15_TRF | 150 | G,J,K | 25 | 100 | 45 | 850 | 0.7 | 580 |
| | NIN-HCR18_TRF | 180 | G,J,K | 25 | 100 | 45 | 750 | 0.77 | 620 |
| | NIN-HCR22_TRF | 220 | G,J,K | 25 | 100 | 45 | 700 | 0.84 | 500 |
| | NIN-HCR27_TRF | 270 | G,J,K | 25 | 100 | 45 | 600 | 0.91 | 500 |
| | NIN-HCR33_TRF | 330 | G,J,K | 25 | 100 | 45 | 570 | 1.05 | 450 |
| | NIN-HCR39_TRF | 390 | G,J,K | 25 | 100 | 45 | 500 | 1.12 | 470 |
| | NIN-HCR47_TRF | 470 | G,J,K | 25 | 100 | 45 | 450 | 1.19 | 470 |
| | NIN-HCR56_TRF | 560 | G,J,K | 25 | 100 | 45 | 415 | 1.33 | 400 |
| | NIN-HCR68_TRF | 680 | G,J,K | 25 | 100 | 45 | 375 | 1.47 | 400 |
| | NIN-HC1R0_TRF | 1000 | G,J,K | 25 | 50 | 35 | 290 | 1.75 | 330 |
| | NIN-HC1R2_TRF | 1200 | G,J,K | 7.9 | 50 | 35 | 250 | 2 | 280 |
| | NIN-HC1R8_TRF | 1800 | G,J,K | 7.9 | 50 | 28 | 160 | 2.6 | 270 |
| NIN-HC4R7_TRF | 4700 | G,J,K | 7.9 | 25 | 18 | 90 | 6.3 | 230 | |



Note: The part numbers identified in the table above are continued support for ongoing business on legacy part numbers and no longer available for new designs. For further details please contact NIC Components

TAPE AND REEL DIMENSIONS (mm):

| TYPE | A | B | C | W | Carrier Type | QTY/REEL |
|--------|------------|------------|------------|------------|--------------|----------|
| NIN-HK | 0.67 ±0.05 | 0.66 ±0.05 | 1.20 ±0.05 | 8.0 ± 0.2 | Punched | 10,000 |
| NIN-HJ | 1.25 ±0.1 | 1.05 ±0.1 | 1.80 ±0.1 | 8.0 ± 0.2 | Embossed | 3,000 |
| NIN-HD | 1.60 ±0.1 | 1.25 ±0.1 | 2.50 ±0.1 | 8.0 ± 0.2 | Embossed | 2,000 |
| NIN-HC | 2.35 ±0.1 | 2.10 ±0.1 | 2.85 ±0.1 | 8.0 ± 0.2 | Embossed | 2,000 |
| NIN-HE | 2.40 ±0.1 | 1.90 max. | 3.80 ±0.1 | 8.0 ± 0.2 | Embossed | 2,000 |
| NIN-HA | 2.96 ±0.1 | 2.80 max. | 3.60 ±0.1 | 8.0 ± 0.2 | Embossed | 1,000 |
| NIN-HB | 3.61 ±0.1 | 3.81 max. | 4.90 ±0.1 | 12.0 ± 0.2 | Embossed | 500 |

EMBOSSED PLASTIC CARRIER DIMENSIONS (mm)

