

SMD POWER INDUCTORS (NR SERIES/NR SERIES H TYPE/S TYPE/V TYPE)



REFLOW

■ PARTS NUMBER

\* Operating Temp.: -25~+120°C (NRS40/50/60/80: -25~+125°C) (Including self-generated heat)

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | R | △ | 4 | 0 | 1 | 8 | T | △ | 1 | 0 | 0 | M | △ |
| ① |   |   | ② |   |   |   | ③ |   | ④ |   |   | ⑤ | ⑥ |

△=Blank space

① Series name

| Code | Series name                 |
|------|-----------------------------|
| NR△  | Coating resin specification |
| NRH  |                             |
| NRS  |                             |
| NRV  |                             |

② Dimensions (L×W×H)

| Code | Dimensions (L×W×H) [mm] |
|------|-------------------------|
| 2010 | 2.0×2.0×1.0             |
| 2012 | 2.0×2.0×1.2             |
| 2410 | 2.4×2.4×1.0             |
| 2412 | 2.4×2.4×1.2             |
| 3010 | 3.0×3.0×1.0             |
| 3012 | 3.0×3.0×1.2             |
| 3015 | 3.0×3.0×1.5             |
| 4010 | 4.0×4.0×1.0             |
| 4012 | 4.0×4.0×1.2             |
| 4018 | 4.0×4.0×1.8             |
| 5010 | 4.9×4.9×1.0             |
| 5012 | 4.9×4.9×1.2             |
| 5014 | 4.9×4.9×1.4             |
| 5020 | 4.9×4.9×2.0             |
| 5024 | 4.9×4.9×2.4             |
| 5030 | 4.9×4.9×3.0             |
| 5040 | 4.9×4.9×4.0             |
| 6010 | 6.0×6.0×1.0             |
| 6012 | 6.0×6.0×1.2             |
| 6014 | 6.0×6.0×1.4             |
| 6020 | 6.0×6.0×2.0             |
| 6028 | 6.0×6.0×2.8             |
| 6045 | 6.0×6.0×4.5             |
| 8030 | 8.0×8.0×3.0             |
| 8040 | 8.0×8.0×4.0             |

③ Packaging

| Code | Packaging |
|------|-----------|
| T△   | Taping    |

④ Nominal inductance

| Code (example) | Nominal inductance [μH] |
|----------------|-------------------------|
| 2R2            | 2.2                     |
| 100            | 10                      |
| 101            | 100                     |

※R=Decimal point

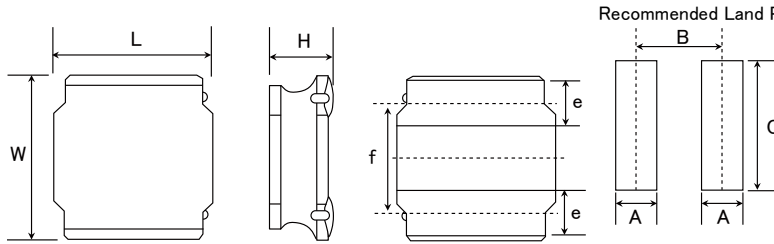
⑤ Inductance tolerance

| Code | Inductance tolerance |
|------|----------------------|
| M    | ±20%                 |
| N    | ±30%                 |

⑥ Internal code

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STANDARD EXTERNAL DIMENSIONS / STANDARD QUANTITY



| Type                      | A    | B    | C   |
|---------------------------|------|------|-----|
| NRV2010                   | 0.65 | 1.35 | 2.0 |
| NRS2012, NRV2012          |      |      |     |
| NRH2410                   | 0.7  | 1.45 | 2.0 |
| NRH2412                   |      |      |     |
| NR 3010, NRH3010          | 0.8  | 2.2  | 2.7 |
| NR 3012, NRH3012, NRV3012 |      |      |     |
| NR 3015, NRS3015          |      |      |     |
| NR 4010, NRS4010          | 1.2  | 2.8  | 3.7 |
| NR 4012, NRS4012          |      |      |     |
| NR 4018, NRS4018          |      |      |     |
| NRS8030                   | 1.8  | 5.6  | 7.5 |
| NR 8040, NRS8040          |      |      |     |

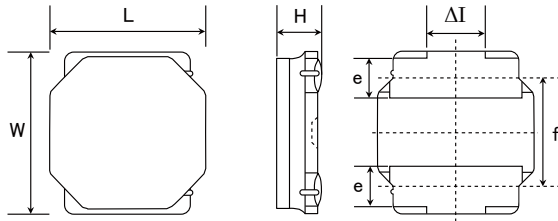
Unit: mm

| Type                          | L                        | W                        | H  | e                         | f                         | Standard quantity<br>[pcs] Taping |
|-------------------------------|--------------------------|--------------------------|--|---------------------------|---------------------------|-----------------------------------|
| NRV2010                       | 2.0±0.1<br>(0.079±0.004) | 2.0±0.1<br>(0.079±0.004) | 1.0 max<br>(0.039 max)                                   | 0.5±0.2<br>(0.020±0.008)  | 1.25±0.2<br>(0.050±0.008) | 2500                              |
| NRS2012<br>NRV2012            | 2.0±0.1<br>(0.079±0.004) | 2.0±0.1<br>(0.079±0.004) | 1.2 max<br>(0.047 max)                                   | 0.5±0.2<br>(0.020±0.008)  | 1.25±0.2<br>(0.050±0.008) | 2500                              |
| NRH2410                       | 2.4±0.1<br>(0.095±0.004) | 2.4±0.1<br>(0.095±0.004) | 1.0 max<br>(0.039 max)                                   | 0.6±0.2<br>(0.024±0.008)  | 1.45±0.2<br>(0.057±0.008) | 2500                              |
| NRH2412                       | 2.4±0.1<br>(0.095±0.004) | 2.4±0.1<br>(0.095±0.004) | 1.2 max<br>(0.047 max)                                   | 0.6±0.2<br>(0.024±0.008)  | 1.45±0.2<br>(0.057±0.008) | 2500                              |
| NR 3010<br>NRH3010            | 3.0±0.1<br>(0.118±0.004) | 3.0±0.1<br>(0.118±0.004) | 1.0 max<br>(0.039 max)                                   | 0.9±0.2<br>(0.035±0.008)  | 1.9±0.2<br>(0.075±0.008)  | 2000                              |
| NR 3012<br>NRH3012<br>NRV3012 | 3.0±0.1<br>(0.118±0.004) | 3.0±0.1<br>(0.118±0.004) | 1.2 max<br>(0.047 max)                                   | 0.9±0.2<br>(0.035±0.008)  | 1.9±0.2<br>(0.075±0.008)  | 2000                              |
| NR 3015<br>NRS3015            | 3.0±0.1<br>(0.118±0.004) | 3.0±0.1<br>(0.118±0.004) | 1.5 max<br>(0.059 max)                                   | 0.9±0.2<br>(0.035±0.008)  | 1.9±0.2<br>(0.075±0.008)  | 2000                              |
| NR 4010<br>NRS4010            | 4.0±0.2<br>(0.158±0.008) | 4.0±0.2<br>(0.158±0.008) | 1.0 max<br>(0.039 max)                                   | 1.1±0.2<br>(0.043±0.008)  | 2.5±0.2<br>(0.098±0.008)  | 5000                              |
| NR 4012<br>NRS4012            | 4.0±0.2<br>(0.158±0.008) | 4.0±0.2<br>(0.158±0.008) | 1.2 max<br>(0.047 max)                                   | 1.1±0.2<br>(0.043±0.008)  | 2.5±0.2<br>(0.098±0.008)  | 4500                              |
| NR 4018<br>NRS4018            | 4.0±0.2<br>(0.158±0.008) | 4.0±0.2<br>(0.158±0.008) | 1.8 max<br>(0.071 max)                                   | 1.1±0.2<br>(0.043±0.008)  | 2.5±0.2<br>(0.098±0.008)  | 3500                              |
| NRS8030                       | 8.0±0.2<br>(0.315±0.008) | 8.0±0.2<br>(0.315±0.008) | 3.0 max<br>(0.118 max)                                   | 1.60±0.3<br>(0.063±0.012) | 5.6±0.3<br>(0.22±0.012)   | 1000                              |
| NR 8040<br>NRS8040            | 8.0±0.2<br>(0.315±0.008) | 8.0±0.2<br>(0.315±0.008) | *1) 4.2 max<br>(0.165 max)<br>*2) 4.0 max<br>(0.158 max) | 1.60±0.3<br>(0.063±0.012) | 5.6±0.3<br>(0.22±0.012)   | 1000                              |

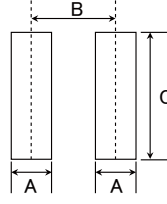
\*1) 0R9~6R8 type, \*2) 100~221 type

Unit: mm (inch)

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Recommended Land Patterns



| Type             | A   | B   | C   |
|------------------|-----|-----|-----|
| NRS5010          | 1.5 | 3.6 | 4.0 |
| NRS5012          |     |     |     |
| NRS5014          |     |     |     |
| NRS5020          |     |     |     |
| NRS5024          |     |     |     |
| NRS5030          |     |     |     |
| NR 5040, NRS5040 | 1.6 | 4.7 | 5.7 |
| NRS6010          |     |     |     |
| NR 6012, NRS6012 |     |     |     |
| NRS6014          |     |     |     |
| NR 6020, NRS6020 |     |     |     |
| NR 6028, NRS6028 |     |     |     |
| NR 6045, NRS6045 |     |     |     |

Unit: mm

| Type               | L                        | W                        | H  | e                         | f                        | ΔI                   | Standard quantity<br>[pcs] Taping |
|--------------------|--------------------------|--------------------------|--|---------------------------|--------------------------|----------------------|-----------------------------------|
| NRS5010            | 4.9±0.2<br>(0.193±0.008) | 4.9±0.2<br>(0.193±0.008) | 1.0 max<br>(0.039 max)                                   | 1.2±0.2<br>(0.047±0.008)  | 3.3±0.2<br>(0.130±0.008) | 1.3typ<br>(0.051typ) | 1000                              |
| NRS5012            | 4.9±0.2<br>(0.193±0.008) | 4.9±0.2<br>(0.193±0.008) | 1.2 max<br>(0.047 max)                                   | 1.2±0.2<br>(0.047±0.008)  | 3.3±0.2<br>(0.130±0.008) | 1.3typ<br>(0.051typ) | 1000                              |
| NRS5014            | 4.9±0.2<br>(0.193±0.008) | 4.9±0.2<br>(0.193±0.008) | 1.4 max<br>(0.055 max)                                   | 1.2±0.2<br>(0.047±0.008)  | 3.3±0.2<br>(0.130±0.008) | 1.3typ<br>(0.051typ) | 1000                              |
| NRS5020            | 4.9±0.2<br>(0.193±0.008) | 4.9±0.2<br>(0.193±0.008) | 2.0 max<br>(0.079 max)                                   | 1.2±0.2<br>(0.047±0.008)  | 3.3±0.2<br>(0.130±0.008) | 1.3typ<br>(0.051typ) | 800                               |
| NRS5024            | 4.9±0.2<br>(0.193±0.008) | 4.9±0.2<br>(0.193±0.008) | *3) 2.5 max<br>(0.098 max)<br>*4) 2.4 max<br>(0.095 max) | 1.2±0.2<br>(0.047±0.008)  | 3.3±0.2<br>(0.130±0.008) | 1.3typ<br>(0.051typ) | 2500                              |
| NRS5030            | 4.9±0.2<br>(0.193±0.008) | 4.9±0.2<br>(0.193±0.008) | *5) 3.1 max<br>(0.122 max)<br>*6) 3.0 max<br>(0.118 max) | 1.2±0.2<br>(0.047±0.008)  | 3.3±0.2<br>(0.130±0.008) | 1.3typ<br>(0.051typ) | 500                               |
| NR 5040<br>NRS5040 | 4.9±0.2<br>(0.193±0.008) | 4.9±0.2<br>(0.193±0.008) | *7) 4.1 max<br>(0.161 max)<br>*8) 4.0 max<br>(0.158 max) | 1.2±0.2<br>(0.047±0.008)  | 3.3±0.2<br>(0.130±0.008) | 1.3typ<br>(0.051typ) | 1500                              |
| NRS6010            | 6.0±0.2<br>(0.236±0.008) | 6.0±0.2<br>(0.236±0.008) | 1.0 max<br>(0.039 max)                                   | 1.35±0.2<br>(0.053±0.008) | 4.0±0.2<br>(0.158±0.008) | 2.3typ<br>(0.091typ) | 1000                              |
| NR 6012<br>NRS6012 | 6.0±0.2<br>(0.236±0.008) | 6.0±0.2<br>(0.236±0.008) | 1.2 max<br>(0.047 max)                                   | 1.35±0.2<br>(0.053±0.008) | 4.0±0.2<br>(0.158±0.008) | 2.3typ<br>(0.091typ) | 1000                              |
| NRS6014            | 6.0±0.2<br>(0.236±0.008) | 6.0±0.2<br>(0.236±0.008) | 1.4 max<br>(0.055 max)                                   | 1.35±0.2<br>(0.053±0.008) | 4.0±0.2<br>(0.158±0.008) | 2.3typ<br>(0.091typ) | 1000                              |
| NR 6020<br>NRS6020 | 6.0±0.2<br>(0.236±0.008) | 6.0±0.2<br>(0.236±0.008) | 2.0 max<br>(0.079 max)                                   | 1.35±0.2<br>(0.053±0.008) | 4.0±0.2<br>(0.158±0.008) | 2.3typ<br>(0.091typ) | 2500                              |
| NR 6028<br>NRS6028 | 6.0±0.2<br>(0.236±0.008) | 6.0±0.2<br>(0.236±0.008) | 2.8 max<br>(0.110 max)                                   | 1.35±0.2<br>(0.053±0.008) | 4.0±0.2<br>(0.158±0.008) | 2.3typ<br>(0.091typ) | 2000                              |
| NR 6045<br>NRS6045 | 6.0±0.2<br>(0.236±0.008) | 6.0±0.2<br>(0.236±0.008) | 4.5 max<br>(0.177 max)                                   | 1.35±0.2<br>(0.053±0.008) | 4.0±0.2<br>(0.158±0.008) | 2.3typ<br>(0.091typ) | 1500                              |

\*3) 1R0~1R5 type, \*4) 2R2~330 type  
 \*5) R47~100 type, \*6) 150~470 type  
 \*7) 1R5~100 type, \*8) 150~470 type

Unit: mm (inch)

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■ PARTS NUMBER

● NRS2012 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS2012T 1R0N GJ | RoHS | 1.0                        | ±30%                 | —  | 0.070                       | 1,900                    | 2,050 | 1,700                          | 1,850 | 100                          |
| NRS2012T 1R5N GJ | RoHS | 1.5                        | ±30%                 | —  | 0.090                       | 1,650                    | 1,800 | 1,500                          | 1,650 | 100                          |
| NRS2012T 2R2M GJ | RoHS | 2.2                        | ±20%                 | —  | 0.107                       | 1,350                    | 1,500 | 1,370                          | 1,500 | 100                          |
| NRS2012T 3R3M GJ | RoHS | 3.3                        | ±20%                 | —  | 0.190                       | 1,000                    | 1,150 | 1,020                          | 1,100 | 100                          |
| NRS2012T 4R7M GJ | RoHS | 4.7                        | ±20%                 | —  | 0.241                       | 900                      | 1,050 | 910                            | 1,000 | 100                          |

● NRV2010 type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRV2010T R47N GF | RoHS | 0.47                       | ±30%                 | —  | 0.052                       | 2,100                    | 2,250 | 2,000                          | 2,300 | 100                          |
| NRV2010T R68N GF | RoHS | 0.68                       | ±30%                 | —  | 0.060                       | 1,850                    | 2,000 | 1,850                          | 2,100 | 100                          |
| NRV2010T 1R0N GF | RoHS | 1.0                        | ±30%                 | —  | 0.080                       | 1,550                    | 1,700 | 1,600                          | 1,850 | 100                          |
| NRV2010T 1R5M GF | RoHS | 1.5                        | ±20%                 | —  | 0.100                       | 1,350                    | 1,450 | 1,450                          | 1,650 | 100                          |
| NRV2010T 2R2M GF | RoHS | 2.2                        | ±20%                 | —  | 0.175                       | 1,100                    | 1,200 | 1,100                          | 1,200 | 100                          |
| NRV2010T 3R3M GF | RoHS | 3.3                        | ±20%                 | —  | 0.250                       | 890                      | 950   | 1,000                          | 1,100 | 100                          |
| NRV2010T 4R7M GF | RoHS | 4.7                        | ±20%                 | —  | 0.320                       | 760                      | 810   | 820                            | 930   | 100                          |

● NRV2012 type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRV2012T 1R0N GF | RoHS | 1.0                        | ±30%                 | —  | 0.073                       | 2,200                    | 2,350 | 1,650                          | 1,830 | 100                          |
| NRV2012T 1R5N GF | RoHS | 1.5                        | ±30%                 | —  | 0.100                       | 1,800                    | 1,950 | 1,400                          | 1,550 | 100                          |
| NRV2012T 2R2M GF | RoHS | 2.2                        | ±20%                 | —  | 0.129                       | 1,600                    | 1,700 | 1,200                          | 1,350 | 100                          |
| NRV2012T 3R3M GF | RoHS | 3.3                        | ±20%                 | —  | 0.227                       | 1,250                    | 1,350 | 900                            | 1,040 | 100                          |
| NRV2012T 4R7M GF | RoHS | 4.7                        | ±20%                 | —  | 0.325                       | 1,100                    | 1,150 | 750                            | 850   | 100                          |

● NRH2410 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRH2410T R68NN 4 | RoHS | 0.68                       | ±30%                 | 120  | 0.060                       | 2,200                    | 2,300 | 1,570                          | 1,810 | 100                          |
| NRH2410T 1R0NN 4 | RoHS | 1.0                        | ±30%                 | 106  | 0.070                       | 1,800                    | 1,950 | 1,410                          | 1,640 | 100                          |
| NRH2410T 1R5MN   | RoHS | 1.5                        | ±20%                 | 94   | 0.110                       | 1,550                    | 1,640 | 1,160                          | 1,320 | 100                          |
| NRH2410T 2R2MN   | RoHS | 2.2                        | ±20%                 | 77   | 0.150                       | 1,290                    | 1,340 | 970                            | 1,110 | 100                          |
| NRH2410T 3R3MN   | RoHS | 3.3                        | ±20%                 | 56   | 0.220                       | 1,000                    | 1,140 | 770                            | 890   | 100                          |
| NRH2410T 4R7MN   | RoHS | 4.7                        | ±20%                 | 50   | 0.290                       | 880                      | 930   | 670                            | 780   | 100                          |
| NRH2410T 6R8MN   | RoHS | 6.8                        | ±20%                 | 43   | 0.410                       | 750                      | 765   | 570                            | 650   | 100                          |
| NRH2410T 100MN   | RoHS | 10                         | ±20%                 | 32   | 0.690                       | 550                      | 605   | 450                            | 520   | 100                          |
| NRH2410T 150MN   | RoHS | 15                         | ±20%                 | 27   | 1.02                        | 470                      | 520   | 370                            | 430   | 100                          |
| NRH2410T 220MN   | RoHS | 22                         | ±20%                 | 22   | 1.47                        | 390                      | 405   | 300                            | 340   | 100                          |

● NRH2412 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRH2412T R47NNGJ | RoHS | 0.47                       | ±30%                 | 180  | 0.050                       | 2,900                    | 3,690 | 2,100                          | 2,300 | 100                          |
| NRH2412T 1R0NNGH | RoHS | 1.0                        | ±30%                 | 101  | 0.077                       | 2,350                    | 2,610 | 1,300                          | 1,540 | 100                          |
| NRH2412T 1R5NNGH | RoHS | 1.5                        | ±30%                 | 89   | 0.100                       | 2,100                    | 2,290 | 1,150                          | 1,390 | 100                          |
| NRH2412T 2R2MNGH | RoHS | 2.2                        | ±20%                 | 72   | 0.140                       | 1,700                    | 1,940 | 1,000                          | 1,190 | 100                          |
| NRH2412T 3R3MNGH | RoHS | 3.3                        | ±20%                 | 56   | 0.225                       | 1,400                    | 1,600 | 750                            | 890   | 100                          |
| NRH2412T 4R7MNGH | RoHS | 4.7                        | ±20%                 | 45   | 0.300                       | 1,150                    | 1,280 | 650                            | 770   | 100                          |
| NRH2412T 6R8MNGH | RoHS | 6.8                        | ±20%                 | 34   | 0.420                       | 950                      | 1,100 | 550                            | 635   | 100                          |
| NRH2412T 100MNGH | RoHS | 10                         | ±20%                 | 29   | 0.600                       | 810                      | 900   | 450                            | 510   | 100                          |

● NRH3010 Shielded type

| Parts number   | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|----------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRH3010T 1R2NN | RoHS | 1.2                        | ±30%                 | 120  | 0.065                       | 1,700                    | 1,740 | 1,480                          | 1,850 | 100                          |
| NRH3010T 1R5NN | RoHS | 1.5                        | ±30%                 | 99   | 0.075                       | 1,440                    | 1,500 | 1,370                          | 1,680 | 100                          |
| NRH3010T 2R2MN | RoHS | 2.2                        | ±20%                 | 86   | 0.083                       | 1,300                    | 1,400 | 1,300                          | 1,550 | 100                          |
| NRH3010T 3R3MN | RoHS | 3.3                        | ±20%                 | 64   | 0.130                       | 1,000                    | 1,020 | 1,030                          | 1,220 | 100                          |
| NRH3010T 4R7MN | RoHS | 4.7                        | ±20%                 | 50   | 0.170                       | 850                      | 930   | 900                            | 1,090 | 100                          |
| NRH3010T 6R8MN | RoHS | 6.8                        | ±20%                 | 44   | 0.250                       | 700                      | 750   | 745                            | 920   | 100                          |
| NRH3010T 100MN | RoHS | 10                         | ±20%                 | 34   | 0.350                       | 600                      | 650   | 620                            | 780   | 100                          |
| NRH3010T 150MN | RoHS | 15                         | ±20%                 | 25   | 0.550                       | 450                      | 520   | 480                            | 600   | 100                          |
| NRH3010T 220MN | RoHS | 22                         | ±20%                 | 22   | 0.770                       | 380                      | 440   | 410                            | 510   | 100                          |
| NRH3010T 330MN | RoHS | 33                         | ±20%                 | 20   | 1.250                       | 290                      | 360   | 350                            | 440   | 100                          |
| NRH3010T 470MN | RoHS | 47                         | ±20%                 | 17   | 2.050                       | 250                      | 300   | 285                            | 320   | 100                          |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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PARTS NUMBER

NRH3012 Shielded type

| Parts number   | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|----------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRH3012T R47NN | RoHS | 0.47                    | ±30%                 | 160                                  | 0.033                    | 2,600                    | 3,200 | 1,900                          | 2,280 | 100                       |
| NRH3012T 1R0NN | RoHS | 1.0                     | ±30%                 | 111                                  | 0.048                    | 2,200                    | 2,500 | 1,710                          | 1,970 | 100                       |
| NRH3012T 1R5NN | RoHS | 1.5                     | ±30%                 | 95                                   | 0.055                    | 1,700                    | 1,900 | 1,600                          | 1,750 | 100                       |
| NRH3012T 2R2MN | RoHS | 2.2                     | ±20%                 | 78                                   | 0.075                    | 1,500                    | 1,750 | 1,370                          | 1,600 | 100                       |
| NRH3012T 3R3MN | RoHS | 3.3                     | ±20%                 | 61                                   | 0.100                    | 1,200                    | 1,500 | 1,210                          | 1,480 | 100                       |
| NRH3012T 4R7MN | RoHS | 4.7                     | ±20%                 | 50                                   | 0.130                    | 1,000                    | 1,200 | 1,060                          | 1,280 | 100                       |
| NRH3012T 6R8MN | RoHS | 6.8                     | ±20%                 | 43                                   | 0.190                    | 850                      | 910   | 890                            | 1,000 | 100                       |
| NRH3012T 100MN | RoHS | 10                      | ±20%                 | 32                                   | 0.270                    | 730                      | 780   | 720                            | 850   | 100                       |
| NRH3012T 150MN | RoHS | 15                      | ±20%                 | 26                                   | 0.450                    | 530                      | 650   | 570                            | 680   | 100                       |
| NRH3012T 220MN | RoHS | 22                      | ±20%                 | 22                                   | 0.630                    | 500                      | 550   | 500                            | 590   | 100                       |
| NRH3012T 330MN | RoHS | 33                      | ±20%                 | 18                                   | 0.960                    | 360                      | 430   | 450                            | 510   | 100                       |
| NRH3012T 470MN | RoHS | 47                      | ±20%                 | 16                                   | 1.340                    | 280                      | 380   | 380                            | 430   | 100                       |

NRV3012 Shielded type

| Parts number  | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|---------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|               |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|               |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRV3012T 1R0N | RoHS | 1.0                     | ±30%                 | 110                                  | 0.065                    | 2,500                    | 3,000 | 1,600                          | 1,970 | 100                       |
| NRV3012T 1R5N | RoHS | 1.5                     | ±30%                 | 92                                   | 0.075                    | 2,100                    | 2,500 | 1,400                          | 1,610 | 100                       |
| NRV3012T 2R2M | RoHS | 2.2                     | ±20%                 | 70                                   | 0.120                    | 1,800                    | 2,100 | 1,100                          | 1,330 | 100                       |
| NRV3012T 3R3M | RoHS | 3.3                     | ±20%                 | 55                                   | 0.150                    | 1,600                    | 1,900 | 1,000                          | 1,260 | 100                       |
| NRV3012T 4R7M | RoHS | 4.7                     | ±20%                 | 48                                   | 0.190                    | 1,250                    | 1,500 | 850                            | 1,040 | 100                       |
| NRV3012T 6R8M | RoHS | 6.8                     | ±20%                 | 40                                   | 0.300                    | 950                      | 1,200 | 650                            | 800   | 100                       |
| NRV3012T 100M | RoHS | 10                      | ±20%                 | 32                                   | 0.470                    | 800                      | 990   | 550                            | 640   | 100                       |

NRS3015 Shielded type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS3015T 1R0NNGH | RoHS | 1.0                     | ±30%                 | 100                                  | 0.030                    | 2,100                    | 2,400 | 2,100                          | 2,350 | 100                       |
| NRS3015T 1R5NNGH | RoHS | 1.5                     | ±30%                 | 87                                   | 0.038                    | 1,800                    | 2,100 | 1,820                          | 2,100 | 100                       |
| NRS3015T 2R2MNGH | RoHS | 2.2                     | ±20%                 | 64                                   | 0.058                    | 1,480                    | 1,700 | 1,500                          | 1,800 | 100                       |
| NRS3015T 3R3MNGH | RoHS | 3.3                     | ±20%                 | 49                                   | 0.078                    | 1,210                    | 1,400 | 1,230                          | 1,500 | 100                       |
| NRS3015T 4R7MNGH | RoHS | 4.7                     | ±20%                 | 40                                   | 0.120                    | 1,020                    | 1,100 | 1,040                          | 1,300 | 100                       |
| NRS3015T 6R8MNGH | RoHS | 6.8                     | ±20%                 | 36                                   | 0.160                    | 870                      | 920   | 880                            | 1,100 | 100                       |
| NRS3015T 100MNGH | RoHS | 10                      | ±20%                 | 28                                   | 0.220                    | 700                      | 750   | 710                            | 840   | 100                       |
| NRS3015T 150MNGH | RoHS | 15                      | ±20%                 | 23                                   | 0.325                    | 580                      | 680   | 680                            | 760   | 100                       |
| NRS3015T 220MNGH | RoHS | 22                      | ±20%                 | 20                                   | 0.520                    | 470                      | 540   | 470                            | 530   | 100                       |
| NRS3015T 330MNGH | RoHS | 33                      | ±20%                 | 18                                   | 0.780                    | 400                      | 440   | 440                            | 490   | 100                       |
| NRS3015T 470MNGH | RoHS | 47                      | ±20%                 | 17                                   | 1.100                    | 325                      | 380   | 350                            | 380   | 100                       |

NRS4010 Shielded type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS4010T 1R0NDGG | RoHS | 1.0                     | ±30%                 | 116                                  | 0.056                    | 2,000                    | 2,280 | 1,900                          | 2,390 | 100                       |
| NRS4010T 2R2MDGG | RoHS | 2.2                     | ±20%                 | 73                                   | 0.085                    | 1,200                    | 1,610 | 1,500                          | 1,800 | 100                       |
| NRS4010T 3R3MDGG | RoHS | 3.3                     | ±20%                 | 58                                   | 0.100                    | 1,100                    | 1,300 | 1,400                          | 1,700 | 100                       |
| NRS4010T 4R7MDGG | RoHS | 4.7                     | ±20%                 | 47                                   | 0.140                    | 950                      | 1,100 | 1,200                          | 1,450 | 100                       |
| NRS4010T 6R8MDGG | RoHS | 6.8                     | ±20%                 | 38                                   | 0.200                    | 800                      | 890   | 1,000                          | 1,200 | 100                       |
| NRS4010T 100MDGG | RoHS | 10                      | ±20%                 | 31                                   | 0.300                    | 620                      | 760   | 750                            | 860   | 100                       |
| NRS4010T 150MDGG | RoHS | 15                      | ±20%                 | 24                                   | 0.430                    | 540                      | 635   | 600                            | 700   | 100                       |
| NRS4010T 220MDGG | RoHS | 22                      | ±20%                 | 19                                   | 0.570                    | 450                      | 540   | 500                            | 600   | 100                       |
| NRS4010T 330MDGG | RoHS | 33                      | ±20%                 | 15                                   | 0.900                    | 350                      | 440   | 400                            | 460   | 100                       |
| NRS4010T 470MDGG | RoHS | 47                      | ±20%                 | 13                                   | 1.250                    | 300                      | 350   | 350                            | 370   | 100                       |

NRS4012 Shielded type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS4012T 1R0NDGG | RoHS | 1.0                     | ±30%                 | 100                                  | 0.042                    | 2,800                    | 2,900 | 2,200                          | 2,670 | 100                       |
| NRS4012T 1R5NDGG | RoHS | 1.5                     | ±30%                 | 90                                   | 0.051                    | 2,300                    | 2,500 | 2,000                          | 2,430 | 100                       |
| NRS4012T 2R2MDGJ | RoHS | 2.2                     | ±20%                 | 70                                   | 0.060                    | 1,650                    | 1,950 | 1,900                          | 2,100 | 100                       |
| NRS4012T 3R3MDGJ | RoHS | 3.3                     | ±20%                 | 60                                   | 0.070                    | 1,400                    | 1,700 | 1,700                          | 1,880 | 100                       |
| NRS4012T 4R7MDGJ | RoHS | 4.7                     | ±20%                 | 45                                   | 0.095                    | 1,200                    | 1,320 | 1,500                          | 1,570 | 100                       |
| NRS4012T 6R8MDGJ | RoHS | 6.8                     | ±20%                 | 35                                   | 0.125                    | 900                      | 1,170 | 1,300                          | 1,400 | 100                       |
| NRS4012T 100MDGJ | RoHS | 10                      | ±20%                 | 30                                   | 0.170                    | 800                      | 990   | 1,100                          | 1,200 | 100                       |
| NRS4012T 150MDGJ | RoHS | 15                      | ±20%                 | 24                                   | 0.260                    | 650                      | 820   | 750                            | 840   | 100                       |
| NRS4012T 220MDGJ | RoHS | 22                      | ±20%                 | 18                                   | 0.400                    | 500                      | 620   | 620                            | 650   | 100                       |
| NRS4012T 330MDGJ | RoHS | 33                      | ±20%                 | 15                                   | 0.600                    | 400                      | 500   | 480                            | 530   | 100                       |
| NRS4012T 470MDGJ | RoHS | 47                      | ±20%                 | 12                                   | 0.770                    | 350                      | 430   | 420                            | 470   | 100                       |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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■ PARTS NUMBER

● NRS4018 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS4018T 1R0NDGJ | RoHS | 1.0                        | ±30%                 | 90   | 0.027                       | 4,000                    | 4,590 | 3,200                          | 3,720 | 100                          |
| NRS4018T 1R5NDGJ | RoHS | 1.5                        | ±30%                 | 75   | 0.037                       | 3,300                    | 3,750 | 2,400                          | 3,000 | 100                          |
| NRS4018T 2R2MDGJ | RoHS | 2.2                        | ±20%                 | 60   | 0.042                       | 3,000                    | 3,110 | 2,200                          | 2,590 | 100                          |
| NRS4018T 3R3MDGJ | RoHS | 3.3                        | ±20%                 | 45   | 0.055                       | 2,300                    | 2,560 | 2,000                          | 2,240 | 100                          |
| NRS4018T 4R7MDGJ | RoHS | 4.7                        | ±20%                 | 35   | 0.070                       | 2,000                    | 2,330 | 1,700                          | 1,880 | 100                          |
| NRS4018T 6R8MDGJ | RoHS | 6.8                        | ±20%                 | 30   | 0.098                       | 1,600                    | 1,820 | 1,450                          | 1,690 | 100                          |
| NRS4018T 100MDGJ | RoHS | 10                         | ±20%                 | 25   | 0.150                       | 1,300                    | 1,440 | 1,200                          | 1,250 | 100                          |
| NRS4018T 150MDGJ | RoHS | 15                         | ±20%                 | 18   | 0.210                       | 1,100                    | 1,150 | 850                            | 915   | 100                          |
| NRS4018T 220MDGJ | RoHS | 22                         | ±20%                 | 15   | 0.290                       | 900                      | 920   | 720                            | 810   | 100                          |
| NRS4018T 330MDGJ | RoHS | 33                         | ±20%                 | 12   | 0.460                       | 700                      | 830   | 550                            | 630   | 100                          |
| NRS4018T 470MDGJ | RoHS | 47                         | ±20%                 | 10   | 0.650                       | 600                      | 700   | 440                            | 520   | 100                          |
| NRS4018T 680MDGJ | RoHS | 68                         | ±20%                 | 8.3  | 1.00                        | 520                      | 600   | 320                            | 400   | 100                          |
| NRS4018T 101MDGJ | RoHS | 100                        | ±20%                 | 6.5  | 1.45                        | 420                      | 490   | 280                            | 330   | 100                          |
| NRS4018T 151MDGJ | RoHS | 150                        | ±20%                 | 5.5  | 2.30                        | 340                      | 390   | 220                            | 280   | 100                          |
| NRS4018T 221MDGJ | RoHS | 220                        | ±20%                 | 4.0  | 3.80                        | 275                      | 310   | 170                            | 210   | 100                          |

● NRS5010 type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS5010T 1R0NMGF | RoHS | 1.0                        | ±30%                 | 95   | 0.070                       | 2,350                    | 2,510 | 1,750                          | 2,000 | 100                          |
| NRS5010T 2R2NMGF | RoHS | 2.2                        | ±30%                 | 65   | 0.105                       | 1,500                    | 1,710 | 1,400                          | 1,600 | 100                          |
| NRS5010T 3R3MMGF | RoHS | 3.3                        | ±20%                 | 42   | 0.125                       | 1,400                    | 1,530 | 1,250                          | 1,520 | 100                          |
| NRS5010T 4R7MMGF | RoHS | 4.7                        | ±20%                 | 37   | 0.145                       | 1,200                    | 1,340 | 1,150                          | 1,390 | 100                          |
| NRS5010T 6R8MMGF | RoHS | 6.8                        | ±20%                 | 33   | 0.185                       | 1,000                    | 1,120 | 1,000                          | 1,210 | 100                          |
| NRS5010T 100MMGF | RoHS | 10                         | ±20%                 | 23   | 0.250                       | 850                      | 970   | 900                            | 950   | 100                          |
| NRS5010T 150MMGF | RoHS | 15                         | ±20%                 | 19   | 0.400                       | 680                      | 740   | 650                            | 700   | 100                          |
| NRS5010T 220MMGF | RoHS | 22                         | ±20%                 | 15   | 0.600                       | 550                      | 620   | 450                            | 560   | 100                          |

● NRS5012 type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS5012T 1R0NMGF | RoHS | 1.0                        | ±30%                 | 100  | 0.053                       | 4,500                    | 4,670 | 2,300                          | 2,750 | 100                          |
| NRS5012T 1R5NMGF | RoHS | 1.5                        | ±30%                 | 86   | 0.070                       | 3,800                    | 3,970 | 2,200                          | 2,470 | 100                          |
| NRS5012T 2R2MMGF | RoHS | 2.2                        | ±20%                 | 70   | 0.085                       | 3,100                    | 3,510 | 2,000                          | 2,300 | 100                          |
| NRS5012T 3R3MMGF | RoHS | 3.3                        | ±20%                 | 48   | 0.160                       | 2,400                    | 2,580 | 1,450                          | 1,650 | 100                          |
| NRS5012T 4R7MMGF | RoHS | 4.7                        | ±20%                 | 40   | 0.180                       | 2,200                    | 2,320 | 1,400                          | 1,560 | 100                          |
| NRS5012T 6R8MMGF | RoHS | 6.8                        | ±20%                 | 36   | 0.260                       | 1,700                    | 1,950 | 1,100                          | 1,260 | 100                          |
| NRS5012T 100MMGF | RoHS | 10                         | ±20%                 | 26   | 0.420                       | 1,400                    | 1,550 | 850                            | 1,000 | 100                          |
| NRS5012T 150MMGF | RoHS | 15                         | ±20%                 | 22   | 0.670                       | 1,200                    | 1,240 | 640                            | 740   | 100                          |

● NRS5014 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS5014T R47NMGG | RoHS | 0.47                       | ±30%                 | 185  | 0.025                       | 5,800                    | 6,400 | 3,300                          | 3,470 | 100                          |
| NRS5014T 1R2NMGG | RoHS | 1.2                        | ±30%                 | 86   | 0.045                       | 3,800                    | 4,200 | 2,400                          | 3,000 | 100                          |
| NRS5014T 2R2NMGG | RoHS | 2.2                        | ±30%                 | 56   | 0.065                       | 2,800                    | 3,100 | 2,000                          | 2,400 | 100                          |
| NRS5014T 3R3NMGG | RoHS | 3.3                        | ±30%                 | 48   | 0.080                       | 2,350                    | 2,650 | 1,700                          | 2,200 | 100                          |
| NRS5014T 4R7NMGG | RoHS | 4.7                        | ±30%                 | 41   | 0.100                       | 2,050                    | 2,400 | 1,400                          | 1,900 | 100                          |
| NRS5014T 6R8MMGG | RoHS | 6.8                        | ±20%                 | 33   | 0.150                       | 1,600                    | 1,850 | 1,200                          | 1,450 | 100                          |
| NRS5014T 100MMGG | RoHS | 10                         | ±20%                 | 27   | 0.200                       | 1,400                    | 1,600 | 1,050                          | 1,250 | 100                          |
| NRS5014T 150MMGG | RoHS | 15                         | ±20%                 | 20   | 0.320                       | 1,100                    | 1,300 | 650                            | 790   | 100                          |
| NRS5014T 220MMGG | RoHS | 22                         | ±20%                 | 16   | 0.450                       | 900                      | 1,000 | 550                            | 660   | 100                          |

● NRS5020 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|------------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS5020T R47NMGG | RoHS | 0.47                       | ±30%                 | 230  | 0.012                       | 6,100                    | 6,900 | 5,000                          | 5,800 | 100                          |
| NRS5020T 1R0NMGJ | RoHS | 1.0                        | ±30%                 | 81   | 0.021                       | 4,000                    | 4,500 | 3,600                          | 3,710 | 100                          |
| NRS5020T 1R5NMGJ | RoHS | 1.5                        | ±30%                 | 68   | 0.026                       | 3,350                    | 3,800 | 3,200                          | 3,540 | 100                          |
| NRS5020T 2R2NMGG | RoHS | 2.2                        | ±30%                 | 57   | 0.035                       | 2,900                    | 3,200 | 2,900                          | 3,200 | 100                          |
| NRS5020T 3R3NMGG | RoHS | 3.3                        | ±30%                 | 46   | 0.048                       | 2,400                    | 2,700 | 2,400                          | 3,080 | 100                          |
| NRS5020T 4R7MMGG | RoHS | 4.7                        | ±20%                 | 37   | 0.060                       | 2,000                    | 2,270 | 2,000                          | 2,370 | 100                          |
| NRS5020T 6R8MMGG | RoHS | 6.8                        | ±20%                 | 30   | 0.090                       | 1,600                    | 1,850 | 1,650                          | 2,200 | 100                          |
| NRS5020T 100MMGG | RoHS | 10                         | ±20%                 | 24   | 0.120                       | 1,300                    | 1,480 | 1,450                          | 1,850 | 100                          |
| NRS5020T 150MMGG | RoHS | 15                         | ±20%                 | 20   | 0.165                       | 1,100                    | 1,260 | 1,200                          | 1,480 | 100                          |
| NRS5020T 220MMGG | RoHS | 22                         | ±20%                 | 17   | 0.260                       | 900                      | 1,100 | 1,000                          | 1,230 | 100                          |
| NRS5020T 470MMGG | RoHS | 47                         | ±20%                 | 12   | 0.435                       | 630                      | 750   | 560                            | 610   | 100                          |
| NRS5020T 101MMGG | RoHS | 100                        | ±20%                 | 7  | 0.850                       | 420                      | 510   | 400                            | 450   | 100                          |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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PARTS NUMBER

● NRS5024 Shielded type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS5024T 1R0NMGJ | RoHS | 1.0                     | ±30%                 | 85                                   | 0.016                    | 5,800                    | 6,800 | 4,400                          | 4,900 | 100                       |
| NRS5024T 1R5NMGJ | RoHS | 1.5                     | ±30%                 | 67                                   | 0.022                    | 5,200                    | 5,800 | 3,600                          | 4,300 | 100                       |
| NRS5024T 2R2NMGJ | RoHS | 2.2                     | ±30%                 | 51                                   | 0.029                    | 4,100                    | 4,800 | 3,100                          | 3,600 | 100                       |
| NRS5024T 3R3NMGJ | RoHS | 3.3                     | ±30%                 | 41                                   | 0.043                    | 3,100                    | 3,700 | 2,400                          | 2,750 | 100                       |
| NRS5024T 4R7MMGJ | RoHS | 4.7                     | ±20%                 | 37                                   | 0.055                    | 2,700                    | 3,400 | 2,000                          | 2,400 | 100                       |
| NRS5024T 6R8MMGJ | RoHS | 6.8                     | ±20%                 | 28                                   | 0.080                    | 2,200                    | 2,750 | 1,600                          | 1,800 | 100                       |
| NRS5024T 100MMGJ | RoHS | 10                      | ±20%                 | 21                                   | 0.125                    | 1,700                    | 2,100 | 1,200                          | 1,460 | 100                       |
| NRS5024T 150MMGJ | RoHS | 15                      | ±20%                 | 18                                   | 0.170                    | 1,400                    | 1,750 | 1,000                          | 1,250 | 100                       |
| NRS5024T 220MMGJ | RoHS | 22                      | ±20%                 | 15                                   | 0.230                    | 1,200                    | 1,450 | 820                            | 900   | 100                       |
| NRS5024T 330MMGJ | RoHS | 33                      | ±20%                 | 11                                   | 0.370                    | 1,000                    | 1,200 | 630                            | 700   | 100                       |

● NRS5030 Shielded type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±30%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS5030T R47NMGJ | RoHS | 0.47                    | ±30%                 | 185                                  | 0.010                    | 9,000                    | 9,400 | 5,000                          | 5,900 | 100                       |
| NRS5030T 1R0NMGJ | RoHS | 1.0                     | ±30%                 | 110                                  | 0.015                    | 6,600                    | 7,400 | 4,000                          | 4,900 | 100                       |
| NRS5030T 2R2NMGJ | RoHS | 2.2                     | ±30%                 | 46                                   | 0.023                    | 4,200                    | 5,000 | 3,500                          | 4,100 | 100                       |
| NRS5030T 3R3MMGJ | RoHS | 3.3                     | ±20%                 | 36                                   | 0.030                    | 3,600                    | 3,900 | 3,000                          | 3,600 | 100                       |
| NRS5030T 4R7MMGJ | RoHS | 4.7                     | ±20%                 | 31                                   | 0.035                    | 3,100                    | 3,500 | 2,600                          | 3,000 | 100                       |
| NRS5030T 6R8MMGJ | RoHS | 6.8                     | ±20%                 | 22                                   | 0.052                    | 2,500                    | 2,800 | 2,300                          | 2,500 | 100                       |
| NRS5030T 100MMGJ | RoHS | 10                      | ±20%                 | 20                                   | 0.070                    | 2,100                    | 2,300 | 1,700                          | 2,000 | 100                       |
| NRS5030T 150MMGJ | RoHS | 15                      | ±20%                 | 14                                   | 0.125                    | 1,600                    | 1,800 | 1,400                          | 1,550 | 100                       |
| NRS5030T 220MMGJ | RoHS | 22                      | ±20%                 | 13                                   | 0.180                    | 1,400                    | 1,500 | 1,050                          | 1,200 | 100                       |
| NRS5030T 330MMGJ | RoHS | 33                      | ±20%                 | 10                                   | 0.225                    | 1,150                    | 1,250 | 800                            | 950   | 100                       |
| NRS5030T 470MMGJ | RoHS | 47                      | ±20%                 | 9                                    | 0.325                    | 950                      | 1,050 | 700                            | 800   | 100                       |

● NRS5040 Shielded type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±30%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS5040T 1R5NMGJ | RoHS | 1.5                     | ±30%                 | 60                                   | 0.017                    | 6,400                    | 6,530 | 4,500                          | 4,730 | 100                       |
| NRS5040T 2R2NMGJ | RoHS | 2.2                     | ±30%                 | 42                                   | 0.022                    | 5,000                    | 5,250 | 3,700                          | 4,080 | 100                       |
| NRS5040T 3R3NMGJ | RoHS | 3.3                     | ±30%                 | 32                                   | 0.027                    | 4,000                    | 4,280 | 3,300                          | 3,770 | 100                       |
| NRS5040T 4R7NMGK | RoHS | 4.7                     | ±30%                 | 28                                   | 0.029                    | 3,300                    | 3,470 | 3,100                          | 3,500 | 100                       |
| NRS5040T 6R8MMGJ | RoHS | 6.8                     | ±20%                 | 21                                   | 0.049                    | 2,800                    | 2,910 | 2,400                          | 2,470 | 100                       |
| NRS5040T 100MMGJ | RoHS | 10                      | ±20%                 | 18                                   | 0.056                    | 2,300                    | 2,470 | 2,100                          | 2,210 | 100                       |
| NRS5040T 150MMGJ | RoHS | 15                      | ±20%                 | 13                                   | 0.080                    | 2,000                    | 2,150 | 1,800                          | 1,920 | 100                       |
| NRS5040T 220MMGK | RoHS | 22                      | ±20%                 | 9                                    | 0.126                    | 1,500                    | 1,580 | 1,400                          | 1,470 | 100                       |
| NRS5040T 330MMGJ | RoHS | 33                      | ±20%                 | 7                                    | 0.180                    | 1,300                    | 1,390 | 1,200                          | 1,270 | 100                       |
| NRS5040T 470MMGJ | RoHS | 47                      | ±20%                 | 6                                    | 0.310                    | 1,100                    | 1,150 | 900                            | 950   | 100                       |

● NRS6010 type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS6010T 1R5MMGF | RoHS | 1.5                     | ±20%                 | 77                                   | 0.090                    | 2,400                    | 2,650 | 1,900                          | 2,150 | 100                       |
| NRS6010T 2R2MMGF | RoHS | 2.2                     | ±20%                 | 56                                   | 0.110                    | 1,900                    | 2,120 | 1,700                          | 1,950 | 100                       |
| NRS6010T 3R3MMGF | RoHS | 3.3                     | ±20%                 | 42                                   | 0.135                    | 1,600                    | 1,750 | 1,500                          | 1,750 | 100                       |
| NRS6010T 4R7MMGF | RoHS | 4.7                     | ±20%                 | 36                                   | 0.165                    | 1,300                    | 1,470 | 1,400                          | 1,600 | 100                       |
| NRS6010T 6R8MMGF | RoHS | 6.8                     | ±20%                 | 30                                   | 0.220                    | 1,200                    | 1,300 | 1,200                          | 1,320 | 100                       |
| NRS6010T 100MMGF | RoHS | 10                      | ±20%                 | 25                                   | 0.270                    | 1,000                    | 1,100 | 1,100                          | 1,200 | 100                       |
| NRS6010T 220MMGF | RoHS | 22                      | ±20%                 | 12                                   | 0.580                    | 650                      | 720   | 700                            | 740   | 100                       |

● NRS6012 Shielded type

| Parts number     | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]    |       |                                |       | Measuring frequency [kHz] |
|------------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|--------------------------|-------|--------------------------------|-------|---------------------------|
|                  |      |                         |                      |                                      |                          | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                           |
|                  |      |                         |                      |                                      |                          | Max.                     | Typ.  | Max.                           | Typ.  |                           |
| NRS6012T 1R0NMGJ | RoHS | 1.0                     | ±30%                 | 95                                   | 0.050                    | 3,000                    | 3,900 | 2,400                          | 2,700 | 100                       |
| NRS6012T 1R5NMGJ | RoHS | 1.5                     | ±30%                 | 69                                   | 0.067                    | 2,600                    | 3,500 | 2,100                          | 2,300 | 100                       |
| NRS6012T 2R5NMGJ | RoHS | 2.5                     | ±30%                 | 45                                   | 0.090                    | 2,100                    | 2,900 | 1,800                          | 2,100 | 100                       |
| NRS6012T 3R3NMGJ | RoHS | 3.3                     | ±30%                 | 42                                   | 0.105                    | 1,800                    | 2,500 | 1,700                          | 1,950 | 100                       |
| NRS6012T 4R7MMGJ | RoHS | 4.7                     | ±20%                 | 36                                   | 0.125                    | 1,600                    | 2,100 | 1,550                          | 1,750 | 100                       |
| NRS6012T 5R3MMGJ | RoHS | 5.3                     | ±20%                 | 34                                   | 0.125                    | 1,500                    | 1,750 | 1,550                          | 1,750 | 100                       |
| NRS6012T 6R8MMGJ | RoHS | 6.8                     | ±20%                 | 30                                   | 0.165                    | 1,300                    | 1,600 | 1,350                          | 1,600 | 100                       |
| NRS6012T 100MMGJ | RoHS | 10                      | ±20%                 | 22                                   | 0.200                    | 1,000                    | 1,400 | 1,200                          | 1,380 | 100                       |
| NRS6012T 150MMGJ | RoHS | 15                      | ±20%                 | 18                                   | 0.295                    | 800                      | 1,100 | 800                            | 950   | 100                       |
| NRS6012T 220MMGJ | RoHS | 22                      | ±20%                 | 12                                   | 0.465                    | 760                      | 900   | 650                            | 750   | 100                       |
| NRS6012T 330MMGJ | RoHS | 33                      | ±20%                 | 8                                    | 0.580                    | 590                      | 800   | 550                            | 670   | 100                       |
| NRS6012T 470MMGJ | RoHS | 47                      | ±20%                 | 6                                    | 0.965                    | 520                      | 630   | 460                            | 540   | 100                       |
| NRS6012T 680MMGJ | RoHS | 68                      | ±20%                 | 3                                    | 1.16                     | 440                      | 560   | 410                            | 450   | 100                       |
| NRS6012T 101MMGJ | RoHS | 100                     | ±20%                 | 1                                    | 1.67                     | 350                      | 490   | 320                            | 380   | 100                       |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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PARTS NUMBER

● NRS6014 Shielded type

| Parts number    | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 20\%$ ) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|-----------------|------|----------------------------------|----------------------|--|--|--------------------------|-------|--------------------------------|-------|------------------------------|
|                 |      |                                  |                      |  |  | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                 |      |                                  |                      |  |  | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS6014T 1R2NMG | RoHS | 1.2                              | $\pm 30\%$           | 77   | 0.042  | 4,000                    | 4,400 | 2,750                          | 3,200 | 100                          |
| NRS6014T 2R2NMG | RoHS | 2.2                              | $\pm 30\%$           | 61   | 0.055  | 3,000                    | 3,500 | 2,300                          | 2,600 | 100                          |
| NRS6014T 3R3NMG | RoHS | 3.3                              | $\pm 30\%$           | 41   | 0.075  | 2,500                    | 2,600 | 2,000                          | 2,200 | 100                          |
| NRS6014T 4R7MMG | RoHS | 4.7                              | $\pm 20\%$           | 36   | 0.090  | 2,000                    | 2,170 | 1,900                          | 1,950 | 100                          |
| NRS6014T 6R8MMG | RoHS | 6.8                              | $\pm 20\%$           | 30   | 0.115  | 1,700                    | 1,880 | 1,650                          | 1,700 | 100                          |
| NRS6014T 100MMG | RoHS | 10                               | $\pm 20\%$           | 24   | 0.140  | 1,400                    | 1,540 | 1,400                          | 1,500 | 100                          |
| NRS6014T 150MMG | RoHS | 15                               | $\pm 20\%$           | 20   | 0.210  | 1,150                    | 1,300 | 1,200                          | 1,280 | 100                          |
| NRS6014T 220MMG | RoHS | 22                               | $\pm 20\%$           | 16   | 0.300  | 950                      | 1,100 | 1,000                          | 1,090 | 100                          |

● NRS6020 Shielded type

| Parts number    | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 20\%$ ) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|-----------------|------|----------------------------------|----------------------|--|--|--------------------------|-------|--------------------------------|-------|------------------------------|
|                 |      |                                  |                      |  |  | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                 |      |                                  |                      |  |  | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS6020T 0R8NMG | RoHS | 0.8                              | $\pm 30\%$           | 110  | 0.020  | 6,400                    | 7,400 | 4,100                          | 4,800 | 100                          |
| NRS6020T 1R5NMG | RoHS | 1.5                              | $\pm 30\%$           | 93   | 0.026  | 4,300                    | 5,300 | 3,600                          | 4,200 | 100                          |
| NRS6020T 2R2NMG | RoHS | 2.2                              | $\pm 30\%$           | 73   | 0.034  | 3,200                    | 4,000 | 2,900                          | 3,400 | 100                          |
| NRS6020T 3R3NMG | RoHS | 3.3                              | $\pm 30\%$           | 55   | 0.040  | 2,800                    | 3,400 | 2,750                          | 3,100 | 100                          |
| NRS6020T 4R7NMG | RoHS | 4.7                              | $\pm 30\%$           | 43   | 0.058  | 2,400                    | 2,800 | 2,150                          | 2,500 | 100                          |
| NRS6020T 6R8NMG | RoHS | 6.8                              | $\pm 30\%$           | 30   | 0.085  | 2,000                    | 2,600 | 1,800                          | 2,100 | 100                          |
| NRS6020T 100MMG | RoHS | 10                               | $\pm 20\%$           | 18   | 0.125  | 1,900                    | 2,240 | 1,500                          | 1,700 | 100                          |
| NRS6020T 220MMG | RoHS | 22                               | $\pm 20\%$           | 11   | 0.290  | 1,250                    | 1,470 | 950                            | 1,100 | 100                          |

● NRS6028 Shielded type

| Parts number    | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 30\%$ ) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency [kHz] |
|-----------------|------|----------------------------------|----------------------|--|--|--------------------------|-------|--------------------------------|-------|------------------------------|
|                 |      |                                  |                      |  |  | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                              |
|                 |      |                                  |                      |  |  | Max.                     | Typ.  | Max.                           | Typ.  |                              |
| NRS6028T 0R9NMG | RoHS | 0.9                              | $\pm 30\%$           | 90   | 0.013  | 6,700                    | 7,900 | 4,600                          | 5,200 | 100                          |
| NRS6028T 1R5NMG | RoHS | 1.5                              | $\pm 30\%$           | 78   | 0.016  | 5,100                    | 6,100 | 4,200                          | 4,700 | 100                          |
| NRS6028T 2R2NMG | RoHS | 2.2                              | $\pm 30\%$           | 68   | 0.020  | 4,200                    | 5,100 | 3,700                          | 4,200 | 100                          |
| NRS6028T 3R0NMG | RoHS | 3.0                              | $\pm 30\%$           | 55   | 0.023  | 3,600                    | 4,300 | 3,400                          | 3,900 | 100                          |
| NRS6028T 4R7MMG | RoHS | 4.7                              | $\pm 20\%$           | 39   | 0.031  | 2,700                    | 3,300 | 3,000                          | 3,400 | 100                          |
| NRS6028T 6R8MMG | RoHS | 6.8                              | $\pm 20\%$           | 25   | 0.043  | 2,600                    | 3,000 | 2,500                          | 2,900 | 100                          |
| NRS6028T 100MMG | RoHS | 10                               | $\pm 20\%$           | 20   | 0.065  | 1,900                    | 2,200 | 1,900                          | 2,200 | 100                          |
| NRS6028T 150MMG | RoHS | 15                               | $\pm 20\%$           | 17   | 0.095  | 1,600                    | 1,900 | 1,800                          | 1,900 | 100                          |
| NRS6028T 220MMG | RoHS | 22                               | $\pm 20\%$           | 12   | 0.135  | 1,300                    | 1,600 | 1,400                          | 1,600 | 100                          |
| NRS6028T 330MMG | RoHS | 33                               | $\pm 20\%$           | 10   | 0.220  | 1,100                    | 1,300 | 1,100                          | 1,250 | 100                          |
| NRS6028T 470MMG | RoHS | 47                               | $\pm 20\%$           | 8  | 0.300  | 1,000                    | 1,150 | 920                            | 1,050 | 100                          |
| NRS6028T 680MMG | RoHS | 68                               | $\pm 20\%$           | 5  | 0.420  | 800                      | 950   | 770                            | 880   | 100                          |
| NRS6028T 101MMG | RoHS | 100                              | $\pm 20\%$           | 3  | 0.600  | 650                      | 750   | 660                            | 750   | 100                          |

● NRS6045 Shielded type

| Parts number    | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 30\%$ ) | Rated current ※) [mA]    |        |                                |       | Measuring<br>frequency [kHz] |
|-----------------|------|----------------------------------|----------------------|--|--|--------------------------|--------|--------------------------------|-------|------------------------------|
|                 |      |                                  |                      |  |  | Saturation current: Idc1 |        | Temperature rise current: Idc2 |       |                              |
|                 |      |                                  |                      |  |  | Max.                     | Typ.   | Max.                           | Typ.  |                              |
| NRS6045T 1R0NMG | RoHS | 1.0                              | $\pm 30\%$           | 110  | 0.014  | 9,800                    | 11,000 | 4,500                          | 5,200 | 100                          |
| NRS6045T 1R3NMG | RoHS | 1.3                              | $\pm 30\%$           | 95   | 0.016  | 8,200                    | 9,300  | 4,200                          | 4,800 | 100                          |
| NRS6045T 1R5NMG | RoHS | 1.5                              | $\pm 30\%$           | 95   | 0.016  | 8,200                    | 9,300  | 4,200                          | 4,800 | 100                          |
| NRS6045T 1R8NMG | RoHS | 1.8                              | $\pm 30\%$           | 80   | 0.019  | 7,200                    | 8,100  | 3,900                          | 4,400 | 100                          |
| NRS6045T 2R2NMG | RoHS | 2.2                              | $\pm 30\%$           | 60   | 0.022  | 6,400                    | 7,300  | 3,600                          | 4,100 | 100                          |
| NRS6045T 2R3NMG | RoHS | 2.3                              | $\pm 30\%$           | 60   | 0.022  | 6,400                    | 7,300  | 3,600                          | 4,100 | 100                          |
| NRS6045T 3R0NMG | RoHS | 3.0                              | $\pm 30\%$           | 45   | 0.024  | 5,600                    | 6,500  | 3,300                          | 4,000 | 100                          |
| NRS6045T 3R3NMG | RoHS | 3.3                              | $\pm 30\%$           | 45   | 0.024  | 5,600                    | 6,500  | 3,300                          | 4,000 | 100                          |
| NRS6045T 4R5MMG | RoHS | 4.5                              | $\pm 20\%$           | 25   | 0.030  | 4,400                    | 5,400  | 3,100                          | 3,600 | 100                          |
| NRS6045T 4R7NMG | RoHS | 4.7                              | $\pm 30\%$           | 25   | 0.030  | 4,400                    | 5,400  | 3,100                          | 3,600 | 100                          |
| NRS6045T 6R3MMG | RoHS | 6.3                              | $\pm 20\%$           | 15   | 0.036  | 3,600                    | 4,300  | 3,000                          | 3,300 | 100                          |
| NRS6045T 6R8MMG | RoHS | 6.8                              | $\pm 20\%$           | 15   | 0.036  | 3,600                    | 4,300  | 3,000                          | 3,300 | 100                          |
| NRS6045T 100MMG | RoHS | 10                               | $\pm 20\%$           | 12   | 0.046  | 3,100                    | 3,600  | 2,400                          | 2,800 | 100                          |
| NRS6045T 150MMG | RoHS | 15                               | $\pm 20\%$           | 10   | 0.070  | 2,500                    | 3,000  | 1,900                          | 2,300 | 100                          |
| NRS6045T 220MMG | RoHS | 22                               | $\pm 20\%$           | 7  | 0.107  | 2,000                    | 2,400  | 1,600                          | 1,900 | 100                          |
| NRS6045T 330MMG | RoHS | 33                               | $\pm 20\%$           | 6  | 0.141  | 1,650                    | 2,000  | 1,400                          | 1,600 | 100                          |
| NRS6045T 470MMG | RoHS | 47                               | $\pm 20\%$           | 5  | 0.211  | 1,400                    | 1,600  | 1,150                          | 1,350 | 100                          |
| NRS6045T 680MMG | RoHS | 68                               | $\pm 20\%$           | 4  | 0.304  | 1,100                    | 1,300  | 950                            | 1,100 | 100                          |
| NRS6045T 101MMG | RoHS | 100                              | $\pm 20\%$           | 3  | 0.466  | 900                      | 1,200  | 750                            | 900   | 100                          |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.



PARTS NUMBER

●NRS8030 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±30%) | Rated current ※) [mA]    |       |                                |       | Measuring<br>frequency[kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|-------|--------------------------------|-------|-----------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |       | Temperature rise current: Idc2 |       |                             |
|                  |      |                            |                      |  |                             | Max.                     | Typ.  | Max.                           | Typ.  |                             |
| NRS8030T 1R0NJGJ | RoHS | 1.0                        | ±30%                 | 120  | 0.009                       | 7,800                    | 9,300 | 6,200                          | 7,600 | 100                         |
| NRS8030T 1R5NJGJ | RoHS | 1.5                        | ±30%                 | 80   | 0.012                       | 6,200                    | 7,800 | 5,300                          | 6,400 | 100                         |
| NRS8030T 2R2NJGJ | RoHS | 2.2                        | ±30%                 | 60   | 0.015                       | 4,900                    | 6,100 | 4,800                          | 5,600 | 100                         |
| NRS8030T 3R3MJGJ | RoHS | 3.3                        | ±20%                 | 50   | 0.019                       | 4,200                    | 5,200 | 4,300                          | 5,100 | 100                         |
| NRS8030T 4R7MJGJ | RoHS | 4.7                        | ±20%                 | 40   | 0.022                       | 3,600                    | 4,400 | 4,000                          | 4,700 | 100                         |
| NRS8030T 6R8MJGJ | RoHS | 6.8                        | ±20%                 | 32   | 0.029                       | 3,000                    | 3,600 | 3,400                          | 4,000 | 100                         |
| NRS8030T 100MJGJ | RoHS | 10                         | ±20%                 | 27   | 0.033                       | 2,400                    | 2,900 | 3,000                          | 3,600 | 100                         |
| NRS8030T 150MJGJ | RoHS | 15                         | ±20%                 | 20   | 0.060                       | 2,000                    | 2,300 | 2,200                          | 2,600 | 100                         |
| NRS8030T 220MJGJ | RoHS | 22                         | ±20%                 | 16   | 0.070                       | 1,750                    | 2,200 | 1,900                          | 2,300 | 100                         |
| NRS8030T 330MJGJ | RoHS | 33                         | ±20%                 | 13   | 0.120                       | 1,300                    | 1,600 | 1,500                          | 1,800 | 100                         |
| NRS8030T 470MJGJ | RoHS | 47                         | ±20%                 | 11   | 0.170                       | 1,100                    | 1,400 | 1,300                          | 1,500 | 100                         |

●NRS8040 Shielded type

| Parts number     | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±30%) | Rated current ※) [mA]    |        |                                |       | Measuring<br>frequency[kHz] |
|------------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|--------|--------------------------------|-------|-----------------------------|
|                  |      |                            |                      |  |                             | Saturation current: Idc1 |        | Temperature rise current: Idc2 |       |                             |
|                  |      |                            |                      |  |                             | Max.                     | Typ.   | Max.                           | Typ.  |                             |
| NRS8040T 0R9NJGJ | RoHS | 0.9                        | ±30%                 | 85   | 0.006                       | 13,000                   | 14,000 | 7,800                          | 9,600 | 100                         |
| NRS8040T 1R0NJGJ | RoHS | 1                          | ±30%                 | 85   | 0.006                       | 13,000                   | 14,000 | 7,800                          | 9,600 | 100                         |
| NRS8040T 1R4NJGJ | RoHS | 1.4                        | ±30%                 | 63   | 0.007                       | 10,000                   | 11,000 | 7,000                          | 8,400 | 100                         |
| NRS8040T 1R5NJGJ | RoHS | 1.5                        | ±30%                 | 63   | 0.007                       | 10,000                   | 11,000 | 7,000                          | 8,400 | 100                         |
| NRS8040T 2R0NJGJ | RoHS | 2.0                        | ±30%                 | 50   | 0.009                       | 8,100                    | 9,200  | 6,300                          | 7,600 | 100                         |
| NRS8040T 2R2NJGJ | RoHS | 2.2                        | ±30%                 | 50   | 0.009                       | 8,100                    | 9,200  | 6,300                          | 7,600 | 100                         |
| NRS8040T 3R3NJGJ | RoHS | 3.3                        | ±30%                 | 34   | 0.015                       | 6,400                    | 6,800  | 4,900                          | 6,000 | 100                         |
| NRS8040T 3R6NJGJ | RoHS | 3.6                        | ±30%                 | 34   | 0.015                       | 6,400                    | 6,800  | 4,900                          | 6,000 | 100                         |
| NRS8040T 4R7NJGJ | RoHS | 4.7                        | ±30%                 | 30   | 0.018                       | 5,400                    | 5,900  | 4,100                          | 5,200 | 100                         |
| NRS8040T 6R8NJGJ | RoHS | 6.8                        | ±30%                 | 24   | 0.025                       | 4,400                    | 4,800  | 3,700                          | 4,400 | 100                         |
| NRS8040T 100MJGJ | RoHS | 10                         | ±20%                 | 22   | 0.034                       | 3,800                    | 4,100  | 3,100                          | 3,500 | 100                         |
| NRS8040T 150MJGJ | RoHS | 15                         | ±20%                 | 16   | 0.050                       | 2,900                    | 3,200  | 2,400                          | 3,000 | 100                         |
| NRS8040T 220MJGJ | RoHS | 22                         | ±20%                 | 13   | 0.066                       | 2,400                    | 2,700  | 2,200                          | 2,600 | 100                         |
| NRS8040T 330MJGK | RoHS | 33                         | ±20%                 | 12   | 0.100                       | 2,000                    | 2,300  | 1,700                          | 1,900 | 100                         |
| NRS8040T 470MJGK | RoHS | 47                         | ±20%                 | 8  | 0.140                       | 1,500                    | 1,800  | 1,500                          | 1,600 | 100                         |
| NRS8040T 680MJGK | RoHS | 68                         | ±20%                 | 7  | 0.210                       | 1,300                    | 1,500  | 1,200                          | 1,300 | 100                         |
| NRS8040T 101MJGK | RoHS | 100                        | ±20%                 | 6  | 0.280                       | 1,100                    | 1,300  | 1,000                          | 1,100 | 100                         |
| NRS8040T 151MJGK | RoHS | 150                        | ±20%                 | 5  | 0.420                       | 900                      | 980    | 800                            | 890   | 100                         |
| NRS8040T 221MJGK | RoHS | 220                        | ±20%                 | 4  | 0.620                       | 700                      | 800    | 670                            | 740   | 100                         |

●NR 3010 Shielded type

| Parts number  | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |                                | Measuring<br>frequency[kHz] |
|---------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|--------------------------------|-----------------------------|
|               |      |                            |                      |  |                             | Saturation current: Idc1 | Temperature rise current: Idc2 |                             |
|               |      |                            |                      |  |                             | Max.                     | Max.                           |                             |
| NR 3010T 1R0N | RoHS | 1.0                        | ±30%                 | 126  | 0.065                       | 1,300                    | 1,400                          | 100                         |
| NR 3010T 1R5N | RoHS | 1.5                        | ±30%                 | 98   | 0.080                       | 1,200                    | 1,300                          | 100                         |
| NR 3010T 2R2M | RoHS | 2.2                        | ±20%                 | 82   | 0.095                       | 1,100                    | 1,100                          | 100                         |
| NR 3010T 3R3M | RoHS | 3.3                        | ±20%                 | 63   | 0.140                       | 870                      | 940                            | 100                         |
| NR 3010T 4R7M | RoHS | 4.7                        | ±20%                 | 56   | 0.190                       | 750                      | 780                            | 100                         |
| NR 3010T 6R8M | RoHS | 6.8                        | ±20%                 | 46   | 0.300                       | 610                      | 630                            | 100                         |
| NR 3010T 100M | RoHS | 10                         | ±20%                 | 35   | 0.450                       | 500                      | 510                            | 100                         |
| NR 3010T 150M | RoHS | 15                         | ±20%                 | 30   | 0.740                       | 400                      | 400                            | 100                         |
| NR 3010T 220M | RoHS | 22                         | ±20%                 | 25   | 1.03                        | 350                      | 350                            | 100                         |
| NR 3010T 330M | RoHS | 33                         | ±20%                 | 20   | 1.55                        | 260                      | 275                            | 100                         |
| NR 3010T 470M | RoHS | 47                         | ±20%                 | 17   | 2.05                        | 220                      | 235                            | 100                         |

●NR 3012 Shielded type

| Parts number  | EHS  | Nominal inductance<br>[μH] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[Ω] (±20%) | Rated current ※) [mA]    |                                | Measuring<br>frequency[kHz] |
|---------------|------|----------------------------|----------------------|--|-----------------------------|--------------------------|--------------------------------|-----------------------------|
|               |      |                            |                      |  |                             | Saturation current: Idc1 | Temperature rise current: Idc2 |                             |
|               |      |                            |                      |  |                             | Max.                     | Max.                           |                             |
| NR 3012T 1R0N | RoHS | 1.0                        | ±30%                 | 110  | 0.050                       | 1,500                    | 1,490                          | 100                         |
| NR 3012T 1R5N | RoHS | 1.5                        | ±30%                 | 92   | 0.060                       | 1,360                    | 1,400                          | 100                         |
| NR 3012T 2R2M | RoHS | 2.2                        | ±20%                 | 70   | 0.080                       | 1,100                    | 1,200                          | 100                         |
| NR 3012T 3R3M | RoHS | 3.3                        | ±20%                 | 55   | 0.100                       | 910                      | 1,050                          | 100                         |
| NR 3012T 4R7M | RoHS | 4.7                        | ±20%                 | 48   | 0.130                       | 770                      | 980                            | 100                         |
| NR 3012T 6R8M | RoHS | 6.8                        | ±20%                 | 40   | 0.190                       | 670                      | 740                            | 100                         |
| NR 3012T 100M | RoHS | 10                         | ±20%                 | 32   | 0.290                       | 540                      | 630                            | 100                         |
| NR 3012T 150M | RoHS | 15                         | ±20%                 | 27   | 0.450                       | 440                      | 485                            | 100                         |
| NR 3012T 220M | RoHS | 22                         | ±20%                 | 22   | 0.630                       | 375                      | 420                            | 100                         |
| NR 3012T 330M | RoHS | 33                         | ±20%                 | 19   | 1.03                        | 310                      | 330                            | 100                         |
| NR 3012T 470M | RoHS | 47                         | ±20%                 | 17   | 1.45                        | 250                      | 280                            | 100                         |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

## PARTS NUMBER

## ● NR 3015 Shielded type

| Parts number  | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 20\%$ ) | Rated current ※) [mA]            |  | Measuring<br>frequency [kHz] |
|---------------|------|----------------------------------|----------------------|--|--|----------------------------------|--|------------------------------|
|               |      |                                  |                      |  |  | Saturation current: Idc1<br>Max. | Temperature rise current: Idc2<br>Max. |                              |
| NR 3015T 1R0N | RoHS | 1.0                              | $\pm 30\%$           | 100  | 0.030  | 2,100                            | 2,100                                  | 100                          |
| NR 3015T 1R5N | RoHS | 1.5                              | $\pm 30\%$           | 87   | 0.040  | 1,800                            | 1,820                                  | 100                          |
| NR 3015T 2R2M | RoHS | 2.2                              | $\pm 20\%$           | 64   | 0.060  | 1,480                            | 1,500                                  | 100                          |
| NR 3015T 3R3M | RoHS | 3.3                              | $\pm 20\%$           | 49   | 0.080  | 1,210                            | 1,230                                  | 100                          |
| NR 3015T 4R7M | RoHS | 4.7                              | $\pm 20\%$           | 40   | 0.120  | 1,020                            | 1,040                                  | 100                          |
| NR 3015T 6R8M | RoHS | 6.8                              | $\pm 20\%$           | 36   | 0.160  | 870                              | 880                                    | 100                          |
| NR 3015T 100M | RoHS | 10                               | $\pm 20\%$           | 28   | 0.230  | 700                              | 710                                    | 100                          |
| NR 3015T 150M | RoHS | 15                               | $\pm 20\%$           | 23   | 0.360  | 560                              | 560                                    | 100                          |
| NR 3015T 220M | RoHS | 22                               | $\pm 20\%$           | 20   | 0.520  | 470                              | 470                                    | 100                          |
| NR 3015T 330M | RoHS | 33                               | $\pm 20\%$           | 18   | 0.840  | 390                              | 370                                    | 100                          |
| NR 3015T 470M | RoHS | 47                               | $\pm 20\%$           | 17   | 1.34   | 320                              | 300                                    | 100                          |

## ● NR 4010 Shielded type

| Parts number  | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 20\%$ ) | Rated current ※) [mA]            |  | Measuring<br>frequency [kHz] |
|---------------|------|----------------------------------|----------------------|--|--|----------------------------------|--|------------------------------|
|               |      |                                  |                      |  |  | Saturation current: Idc1<br>Max. | Temperature rise current: Idc2<br>Max. |                              |
| NR 4010T 1R0N | RoHS | 1.0                              | $\pm 30\%$           | 116  | 0.100  | 1,800                            | 1,050                                  | 100                          |
| NR 4010T 2R2N | RoHS | 2.2                              | $\pm 30\%$           | 73   | 0.150  | 1,150                            | 890                                    | 100                          |
| NR 4010T 3R3M | RoHS | 3.3                              | $\pm 20\%$           | 58   | 0.180  | 1,100                            | 820                                    | 100                          |
| NR 4010T 4R7M | RoHS | 4.7                              | $\pm 20\%$           | 47   | 0.210  | 900                              | 750                                    | 100                          |
| NR 4010T 6R8M | RoHS | 6.8                              | $\pm 20\%$           | 38   | 0.300  | 740                              | 620                                    | 100                          |
| NR 4010T 100M | RoHS | 10                               | $\pm 20\%$           | 31   | 0.380  | 560                              | 600                                    | 100                          |
| NR 4010T 150M | RoHS | 15                               | $\pm 20\%$           | 24   | 0.510  | 470                              | 510                                    | 100                          |
| NR 4010T 220M | RoHS | 22                               | $\pm 20\%$           | 19   | 0.870  | 360                              | 400                                    | 100                          |
| NR 4010T 330M | RoHS | 33                               | $\pm 20\%$           | 15   | 1.54   | 280                              | 300                                    | 100                          |
| NR 4010T 470M | RoHS | 47                               | $\pm 20\%$           | 13   | 1.81   | 240                              | 280                                    | 100                          |

## ● NR 4012 Shielded type

| Parts number  | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 20\%$ ) | Rated current ※) [mA]            |  | Measuring<br>frequency [kHz] |
|---------------|------|----------------------------------|----------------------|--|--|----------------------------------|--|------------------------------|
|               |      |                                  |                      |  |  | Saturation current: Idc1<br>Max. | Temperature rise current: Idc2<br>Max. |                              |
| NR 4012T 1R0N | RoHS | 1.0                              | $\pm 30\%$           | 131  | 0.060  | 2,500                            | 1,500                                  | 100                          |
| NR 4012T 2R2M | RoHS | 2.2                              | $\pm 20\%$           | 66   | 0.090  | 1,650                            | 1,200                                  | 100                          |
| NR 4012T 3R3M | RoHS | 3.3                              | $\pm 20\%$           | 50   | 0.130  | 1,200                            | 980                                    | 100                          |
| NR 4012T 4R7M | RoHS | 4.7                              | $\pm 20\%$           | 45   | 0.140  | 1,050                            | 960                                    | 100                          |
| NR 4012T 6R8M | RoHS | 6.8                              | $\pm 20\%$           | 35   | 0.180  | 900                              | 840                                    | 100                          |
| NR 4012T 100M | RoHS | 10                               | $\pm 20\%$           | 28   | 0.240  | 740                              | 770                                    | 100                          |
| NR 4012T 150M | RoHS | 15                               | $\pm 20\%$           | 23   | 0.400  | 560                              | 600                                    | 100                          |
| NR 4012T 220M | RoHS | 22                               | $\pm 20\%$           | 18   | 0.480  | 510                              | 540                                    | 100                          |
| NR 4012T 330M | RoHS | 33                               | $\pm 20\%$           | 15   | 0.810  | 400                              | 420                                    | 100                          |
| NR 4012T 470M | RoHS | 47                               | $\pm 20\%$           | 12   | 1.00   | 350                              | 370                                    | 100                          |

## ● NR 4018 Shielded type

| Parts number  | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 20\%$ ) | Rated current ※) [mA]            |  | Measuring<br>frequency [kHz] |
|---------------|------|----------------------------------|----------------------|--|--|----------------------------------|--|------------------------------|
|               |      |                                  |                      |  |  | Saturation current: Idc1<br>Max. | Temperature rise current: Idc2<br>Max. |                              |
| NR 4018T 1R0N | RoHS | 1.0                              | $\pm 30\%$           | 80   | 0.030  | 4,000                            | 1,830                                  | 100                          |
| NR 4018T 2R2M | RoHS | 2.2                              | $\pm 20\%$           | 52   | 0.060  | 2,700                            | 1,440                                  | 100                          |
| NR 4018T 3R3M | RoHS | 3.3                              | $\pm 20\%$           | 44   | 0.070  | 2,000                            | 1,230                                  | 100                          |
| NR 4018T 4R7M | RoHS | 4.7                              | $\pm 20\%$           | 34   | 0.090  | 1,700                            | 1,200                                  | 100                          |
| NR 4018T 6R8M | RoHS | 6.8                              | $\pm 20\%$           | 29   | 0.110  | 1,450                            | 1,060                                  | 100                          |
| NR 4018T 100M | RoHS | 10                               | $\pm 20\%$           | 24   | 0.180  | 1,200                            | 840                                    | 100                          |
| NR 4018T 150M | RoHS | 15                               | $\pm 20\%$           | 19   | 0.250  | 940                              | 650                                    | 100                          |
| NR 4018T 220M | RoHS | 22                               | $\pm 20\%$           | 16   | 0.360  | 800                              | 590                                    | 100                          |
| NR 4018T 330M | RoHS | 33                               | $\pm 20\%$           | 12   | 0.530  | 650                              | 490                                    | 100                          |
| NR 4018T 470M | RoHS | 47                               | $\pm 20\%$           | 10   | 0.650  | 570                              | 420                                    | 100                          |
| NR 4018T 680M | RoHS | 68                               | $\pm 20\%$           | 8.3  | 1.00   | 470                              | 320                                    | 100                          |
| NR 4018T 101M | RoHS | 100                              | $\pm 20\%$           | 6.5  | 1.50   | 400                              | 270                                    | 100                          |
| NR 4018T 151M | RoHS | 150                              | $\pm 20\%$           | 5.5  | 2.50   | 310                              | 220                                    | 100                          |
| NR 4018T 221M | RoHS | 220                              | $\pm 20\%$           | 4.0  | 4.00   | 270                              | 170                                    | 100                          |

## ● NR 5040 Shielded type

| Parts number  | EHS  | Nominal inductance<br>[ $\mu$ H] | Inductance tolerance | Self-resonant<br>frequency<br>[MHz] (min.) | DC Resistance<br>[ $\Omega$ ] ( $\pm 30\%$ ) | Rated current ※) [mA]            |  | Measuring<br>frequency [kHz] |
|---------------|------|----------------------------------|----------------------|--|--|----------------------------------|--|------------------------------|
|               |      |                                  |                      |  |  | Saturation current: Idc1<br>Max. | Temperature rise current: Idc2<br>Max. |                              |
| NR 5040T 1R5N | RoHS | 1.5                              | $\pm 30\%$           | 60   | 0.020  | 6,000                            | 3,600                                  | 100                          |
| NR 5040T 2R2N | RoHS | 2.2                              | $\pm 30\%$           | 42   | 0.022  | 4,600                            | 3,500                                  | 100                          |
| NR 5040T 3R3N | RoHS | 3.3                              | $\pm 30\%$           | 32   | 0.027  | 3,800                            | 3,300                                  | 100                          |
| NR 5040T 4R7N | RoHS | 4.7                              | $\pm 30\%$           | 28   | 0.029  | 3,300                            | 3,100                                  | 100                          |
| NR 5040T 6R8M | RoHS | 6.8                              | $\pm 20\%$           | 21   | 0.049  | 2,600                            | 2,300                                  | 100                          |
| NR 5040T 100M | RoHS | 10                               | $\pm 20\%$           | 18   | 0.056  | 2,300                            | 2,100                                  | 100                          |
| NR 5040T 150M | RoHS | 15                               | $\pm 20\%$           | 13   | 0.080  | 2,000                            | 1,800                                  | 100                          |
| NR 5040T 220M | RoHS | 22                               | $\pm 20\%$           | 9  | 0.126  | 1,600                            | 1,400                                  | 100                          |
| NR 5040T 330M | RoHS | 33                               | $\pm 20\%$           | 7  | 0.180  | 1,300                            | 1,200                                  | 100                          |
| NR 5040T 470M | RoHS | 47                               | $\pm 20\%$           | 6  | 0.310  | 1,100                            | 900                                    | 100                          |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

► This catalog contains the typical specification only due to the limitation of space. When you consider the purchase of our products, please check our product specification sheets. For details of each product (characteristics graph, reliability information, precautions for use, and so on), see our website (<http://www.ty-top.com/>).

PARTS NUMBER

NR 6012 Shielded type

| Parts number   | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]         |                                     | Measuring frequency [kHz] |
|----------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|-------------------------------|-------------------------------------|---------------------------|
|                |      |                         |                      |                                      |                          | Saturation current: Idc1 Max. | Temperature rise current: Idc2 Max. |                           |
| NR 6012T 2R5NE | RoHS | 2.5                     | ±30%                 | 45                                   | 0.090                    | 2,100                         | 1,730                               | 100                       |
| NR 6012T 4R0NE | RoHS | 4.0                     | ±30%                 | 39                                   | 0.105                    | 1,800                         | 1,570                               | 100                       |
| NR 6012T 5R3ME | RoHS | 5.3                     | ±20%                 | 34                                   | 0.125                    | 1,500                         | 1,400                               | 100                       |
| NR 6012T 6R8ME | RoHS | 6.8                     | ±20%                 | 30                                   | 0.165                    | 1,300                         | 1,180                               | 100                       |
| NR 6012T 100ME | RoHS | 10                      | ±20%                 | 22                                   | 0.235                    | 1,000                         | 1,000                               | 100                       |
| NR 6012T 150ME | RoHS | 15                      | ±20%                 | 18                                   | 0.330                    | 800                           | 790                                 | 100                       |
| NR 6012T 220ME | RoHS | 22                      | ±20%                 | 12                                   | 0.530                    | 760                           | 630                                 | 100                       |
| NR 6012T 330ME | RoHS | 33                      | ±20%                 | 8                                    | 0.700                    | 590                           | 530                                 | 100                       |
| NR 6012T 470ME | RoHS | 47                      | ±20%                 | 6                                    | 1.05                     | 520                           | 460                                 | 100                       |
| NR 6012T 680ME | RoHS | 68                      | ±20%                 | 3                                    | 1.35                     | 440                           | 410                                 | 100                       |
| NR 6012T 101ME | RoHS | 100                     | ±20%                 | 1                                    | 2.18                     | 350                           | 320                                 | 100                       |

NR 6020 Shielded type

| Parts number  | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±20%) | Rated current ※) [mA]         |                                     | Measuring frequency [kHz] |
|---------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|-------------------------------|-------------------------------------|---------------------------|
|               |      |                         |                      |                                      |                          | Saturation current: Idc1 Max. | Temperature rise current: Idc2 Max. |                           |
| NR 6020T 0R8N | RoHS | 0.8                     | ±30%                 | 110                                  | 0.020                    | 5,500                         | 3,800                               | 100                       |
| NR 6020T 1R5N | RoHS | 1.5                     | ±30%                 | 93                                   | 0.026                    | 4,000                         | 3,200                               | 100                       |
| NR 6020T 2R2N | RoHS | 2.2                     | ±30%                 | 73                                   | 0.034                    | 3,200                         | 2,700                               | 100                       |
| NR 6020T 3R3N | RoHS | 3.3                     | ±30%                 | 55                                   | 0.040                    | 2,800                         | 2,600                               | 100                       |
| NR 6020T 4R7N | RoHS | 4.7                     | ±30%                 | 43                                   | 0.058                    | 2,400                         | 2,000                               | 100                       |
| NR 6020T 6R8N | RoHS | 6.8                     | ±30%                 | 30                                   | 0.085                    | 2,000                         | 1,800                               | 100                       |
| NR 6020T 100M | RoHS | 10                      | ±20%                 | 18                                   | 0.125                    | 1,700                         | 1,400                               | 100                       |
| NR 6020T 220M | RoHS | 22                      | ±20%                 | 11                                   | 0.290                    | 1,050                         | 950                                 | 100                       |

NR 6028 Shielded type

| Parts number  | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±30%) | Rated current ※) [mA]         |                                     | Measuring frequency [kHz] |
|---------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|-------------------------------|-------------------------------------|---------------------------|
|               |      |                         |                      |                                      |                          | Saturation current: Idc1 Max. | Temperature rise current: Idc2 Max. |                           |
| NR 6028T 0R9N | RoHS | 0.9                     | ±30%                 | 90                                   | 0.013                    | 6,600                         | 4,600                               | 100                       |
| NR 6028T 1R5N | RoHS | 1.5                     | ±30%                 | 78                                   | 0.016                    | 5,000                         | 4,200                               | 100                       |
| NR 6028T 2R2N | RoHS | 2.2                     | ±30%                 | 68                                   | 0.020                    | 4,200                         | 3,700                               | 100                       |
| NR 6028T 3R0N | RoHS | 3.0                     | ±30%                 | 55                                   | 0.023                    | 3,600                         | 3,400                               | 100                       |
| NR 6028T 4R7M | RoHS | 4.7                     | ±20%                 | 39                                   | 0.031                    | 2,700                         | 3,000                               | 100                       |
| NR 6028T 6R0M | RoHS | 6.0                     | ±20%                 | 30                                   | 0.040                    | 2,500                         | 2,500                               | 100                       |
| NR 6028T 100M | RoHS | 10                      | ±20%                 | 20                                   | 0.065                    | 1,900                         | 1,900                               | 100                       |
| NR 6028T 150M | RoHS | 15                      | ±20%                 | 17                                   | 0.095                    | 1,600                         | 1,800                               | 100                       |
| NR 6028T 220M | RoHS | 22                      | ±20%                 | 12                                   | 0.135                    | 1,300                         | 1,400                               | 100                       |
| NR 6028T 330M | RoHS | 33                      | ±20%                 | 10                                   | 0.220                    | 1,100                         | 1,100                               | 100                       |
| NR 6028T 470M | RoHS | 47                      | ±20%                 | 8                                    | 0.300                    | 950                           | 920                                 | 100                       |
| NR 6028T 680M | RoHS | 68                      | ±20%                 | 5                                    | 0.420                    | 760                           | 770                                 | 100                       |
| NR 6028T 101M | RoHS | 100                     | ±20%                 | 3                                    | 0.600                    | 620                           | 660                                 | 100                       |

NR 6045 Shielded type

| Parts number  | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±30%) | Rated current ※) [mA]         |                                     | Measuring frequency [kHz] |
|---------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|-------------------------------|-------------------------------------|---------------------------|
|               |      |                         |                      |                                      |                          | Saturation current: Idc1 Max. | Temperature rise current: Idc2 Max. |                           |
| NR 6045T 1R0N | RoHS | 1.0                     | ±30%                 | 110                                  | 0.014                    | 8,500                         | 4,200                               | 100                       |
| NR 6045T 1R3N | RoHS | 1.3                     | ±30%                 | 95                                   | 0.016                    | 8,000                         | 4,000                               | 100                       |
| NR 6045T 1R8N | RoHS | 1.8                     | ±30%                 | 80                                   | 0.018                    | 7,000                         | 3,700                               | 100                       |
| NR 6045T 2R3N | RoHS | 2.3                     | ±30%                 | 60                                   | 0.021                    | 6,000                         | 3,500                               | 100                       |
| NR 6045T 3R0N | RoHS | 3.0                     | ±30%                 | 45                                   | 0.024                    | 5,000                         | 3,200                               | 100                       |
| NR 6045T 4R5M | RoHS | 4.5                     | ±20%                 | 25                                   | 0.031                    | 4,000                         | 3,000                               | 100                       |
| NR 6045T 6R3M | RoHS | 6.3                     | ±20%                 | 15                                   | 0.038                    | 3,800                         | 2,800                               | 100                       |
| NR 6045T 100M | RoHS | 10                      | ±20%                 | 12                                   | 0.047                    | 3,000                         | 2,500                               | 100                       |
| NR 6045T 150M | RoHS | 15                      | ±20%                 | 10                                   | 0.077                    | 2,300                         | 1,900                               | 100                       |
| NR 6045T 220M | RoHS | 22                      | ±20%                 | 7                                    | 0.115                    | 1,900                         | 1,500                               | 100                       |
| NR 6045T 330M | RoHS | 33                      | ±20%                 | 6                                    | 0.145                    | 1,500                         | 1,400                               | 100                       |
| NR 6045T 470M | RoHS | 47                      | ±20%                 | 5                                    | 0.220                    | 1,300                         | 1,100                               | 100                       |
| NR 6045T 680M | RoHS | 68                      | ±20%                 | 4                                    | 0.330                    | 1,000                         | 900                                 | 100                       |
| NR 6045T 101M | RoHS | 100                     | ±20%                 | 3                                    | 0.500                    | 800                           | 700                                 | 100                       |

NR 8040 Shielded type

| Parts number  | EHS  | Nominal inductance [μH] | Inductance tolerance | Self-resonant frequency [MHz] (min.) | DC Resistance [Ω] (±30%) | Rated current ※) [mA]         |                                     | Measuring frequency [kHz] |
|---------------|------|-------------------------|----------------------|--------------------------------------|--------------------------|-------------------------------|-------------------------------------|---------------------------|
|               |      |                         |                      |                                      |                          | Saturation current: Idc1 Max. | Temperature rise current: Idc2 Max. |                           |
| NR 8040T 0R9N | RoHS | 0.9                     | ±30%                 | 85                                   | 0.006                    | 11,000                        | 7,800                               | 100                       |
| NR 8040T 1R4N | RoHS | 1.4                     | ±30%                 | 63                                   | 0.007                    | 9,000                         | 7,000                               | 100                       |
| NR 8040T 2R0N | RoHS | 2.0                     | ±30%                 | 50                                   | 0.009                    | 7,400                         | 6,300                               | 100                       |
| NR 8040T 3R6N | RoHS | 3.6                     | ±30%                 | 34                                   | 0.015                    | 5,300                         | 4,900                               | 100                       |
| NR 8040T 4R7N | RoHS | 4.7                     | ±30%                 | 30                                   | 0.018                    | 4,700                         | 4,100                               | 100                       |
| NR 8040T 6R8N | RoHS | 6.8                     | ±30%                 | 24                                   | 0.025                    | 4,000                         | 3,700                               | 100                       |
| NR 8040T 100M | RoHS | 10                      | ±20%                 | 22                                   | 0.034                    | 3,400                         | 3,100                               | 100                       |
| NR 8040T 150M | RoHS | 15                      | ±20%                 | 16                                   | 0.050                    | 2,700                         | 2,400                               | 100                       |
| NR 8040T 220M | RoHS | 22                      | ±20%                 | 13                                   | 0.066                    | 2,200                         | 2,200                               | 100                       |
| NR 8040T 330M | RoHS | 33                      | ±20%                 | 12                                   | 0.100                    | 1,900                         | 1,700                               | 100                       |
| NR 8040T 470M | RoHS | 47                      | ±20%                 | 8                                    | 0.150                    | 1,500                         | 1,400                               | 100                       |
| NR 8040T 680M | RoHS | 68                      | ±20%                 | 7                                    | 0.230                    | 1,200                         | 1,100                               | 100                       |
| NR 8040T 101M | RoHS | 100                     | ±20%                 | 6                                    | 0.290                    | 1,000                         | 1,000                               | 100                       |

※) The saturation current value (Idc1) is the DC current value having inductance decrease down to 30%. (at 20°C)

※) The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C. (at 20°C)

※) The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

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