

# SMDインダクタ

## SMD INDUCTORS



|                |                   |            |                                 |
|----------------|-------------------|------------|---------------------------------|
| OPERATING TEMP | 03, 04, 05, 06タイプ | -25~+105°C | (製品自己発熱を含む)                     |
|                | 08タイプ             | -25~+85°C  | (Including self-generated heat) |

### 特長 FEATURES

- ・省スペース及び低背化
- ・大電流対応
- ・SMT対応

- ・ Small surface area and low profile.
- ・ Designed for high current applications where a surface mount component is required.
- ・ Available in embossed tape and reel.

### 用途 APPLICATIONS

- ・ HDD、デジタルビデオカメラ、ノート型パソコンなど各種機器の電源回路、DC / DCコンバータ等

- ・ Power supply circuits/DC-DC converters in a variety of applications where compact size is vital, such as digital camcorders, HDD, notebook PCs, etc.

### 形名表記法 ORDERING CODE

|  |  |  |                                   |         |         |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
|--|--|--|-----------------------------------|---------|---------|-------|-------|---|---|---------|---|---|---------|---|---------|---------|---------|---------|---------|--|--|
| <b>1</b>   | <b>3</b>   | <b>5</b>   | <b>7</b>                          |         |         |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| <b>形式</b><br>N△ チョークコイル(非シールドタイプ)<br>NP チョークコイル(シールドタイプ)<br>△=スペース | <b>形状</b><br>DP ドラム形(台座付き)<br>DZ ドラム形(台座なし)<br>S△, SZ ドラム応用形<br>△=スペース   | <b>公称インダクタンス[μH]</b><br>例<br>1R0 1.0<br>100 10<br>102 1000<br>※R=小数点 | <b>当社管理記号</b><br>△△ 標準品<br>△=スペース |         |         |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| <b>2</b>   | <b>4</b>   | <b>6</b>   |                                   |         |         |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| <b>コア寸法(mm)</b><br>03 3.8<br>04 4.7<br>05 5.6<br>06 6.8<br>08 9.0  | <b>高さ寸法(mm)</b><br><table border="1"> <tr> <td></td> <td>03タイプ</td> <td>04タイプ</td> <td>05タイプ</td> <td>06タイプ</td> <td>08タイプ</td> </tr> <tr> <td>A</td> <td>—</td> <td>3.0max.</td> <td>—</td> <td>—</td> <td>6.0max.</td> </tr> <tr> <td>B</td> <td>1.8max.</td> <td>2.0max.</td> <td>2.8max.</td> <td>3.2max.</td> <td>5.0max.</td> </tr> </table> |  | 03タイプ                             | 04タイプ   | 05タイプ   | 06タイプ | 08タイプ | A | — | 3.0max. | — | — | 6.0max. | B | 1.8max. | 2.0max. | 2.8max. | 3.2max. | 5.0max. | <b>インダクタンス許容差</b><br>J ±5%<br>K ±10%<br>M ±20%<br>N ±30% |  |
|  | 03タイプ  | 04タイプ  | 05タイプ                             | 06タイプ   | 08タイプ   |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| A  | —  | 3.0max.  | —                                 | —       | 6.0max. |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| B  | 1.8max.  | 2.0max.  | 2.8max.                           | 3.2max. | 5.0max. |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| N P 0 6 D Z B 1 0 1 K ○ ○<br>1 2 3 4 5 6 7                         |  |  |                                   |         |         |       |       |   |   |         |   |   |         |   |         |         |         |         |         |  |  |

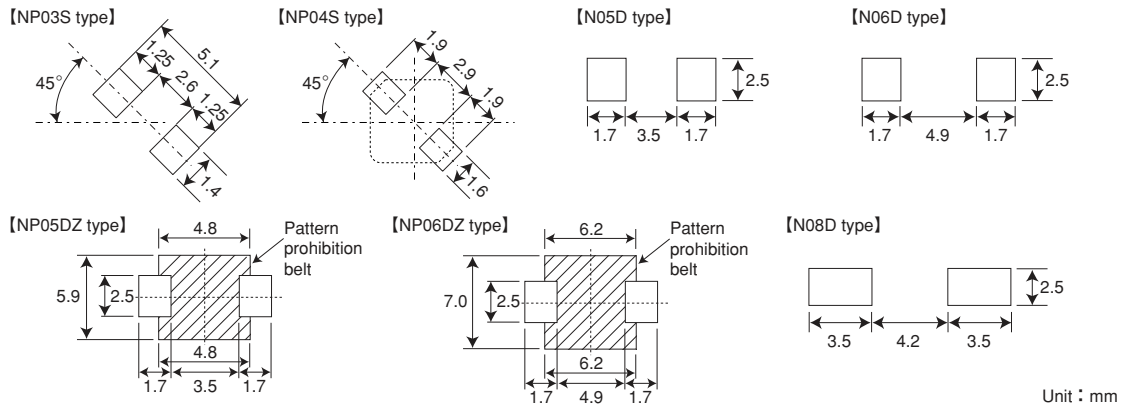
|  |  |   |  |         |         |         |         |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
|--|--|---|--|---------|---------|---------|---------|---|---|---------|---|---|---------|---|---------|---------|---------|---------|---------|--|--|
| <b>1</b>   | <b>3</b>   | <b>5</b>  | <b>7</b>   |         |         |         |         |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| <b>Type</b><br>N△ Choke coil (non-shielded type)<br>NP Choke coil (shielded type)<br>△=Blank space | <b>Shape</b><br>DP Drum type (With base)<br>DZ Drum type (Without base)<br>S△, SZ Applied drum type<br>△=Blank space   | <b>Nominal inductance[μH]</b><br>example<br>1R0 1.0<br>100 10<br>102 1000<br>※R=Decimal point | <b>Internal code</b><br>△△ Standard product<br>△=Blank space |         |         |         |         |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| <b>2</b>   | <b>4</b>   | <b>6</b>  |  |         |         |         |         |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| <b>Core dimension(mm)</b><br>03 3.8<br>04 4.7<br>05 5.6<br>06 6.8<br>08 9.0                        | <b>Height(mm)</b><br><table border="1"> <tr> <td></td> <td>03 type</td> <td>04 type</td> <td>05 type</td> <td>06 type</td> <td>08 type</td> </tr> <tr> <td>A</td> <td>—</td> <td>3.0max.</td> <td>—</td> <td>—</td> <td>6.0max.</td> </tr> <tr> <td>B</td> <td>1.8max.</td> <td>2.0max.</td> <td>2.8max.</td> <td>3.2max.</td> <td>5.0max.</td> </tr> </table> |   | 03 type  | 04 type | 05 type | 06 type | 08 type | A | — | 3.0max. | — | — | 6.0max. | B | 1.8max. | 2.0max. | 2.8max. | 3.2max. | 5.0max. | <b>Inductance tolerance</b><br>J ±5%<br>K ±10%<br>M ±20%<br>N ±30% |  |
|  | 03 type  | 04 type   | 05 type  | 06 type | 08 type |         |         |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| A  | —  | 3.0max.   | —  | —       | 6.0max. |         |         |   |   |         |   |   |         |   |         |         |         |         |         |  |  |
| B  | 1.8max.  | 2.0max.   | 2.8max.  | 3.2max. | 5.0max. |         |         |   |   |         |   |   |         |   |         |         |         |         |         |  |  |

# 外形寸法 EXTERNAL DIMENSIONS

| Type                | 非シールド<br>Non-Shielded type |                          | 磁気シールド<br>Shielded type  |                          |                          |                          | 非シールド<br>Non-Shielded type |                           |                |
|---------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|---------------------------|----------------|
|                     | N05D                       | N06D                     | NP03S                    | NP04S                    |                          | NP05DZ                   | NP06DZ                     | N08DP                     |                |
| Fig.                |                            |                          |                          |                          |                          |                          |                            |                           |                |
| 高さ記号<br>Height code | B                          | B                        | B                        | A                        | B, ZB                    | B                        | B                          | A                         | B              |
| L                   | 5.9±0.3<br>(0.232±0.012)   | 7.3±0.3<br>(0.287±0.012) | 4.0±0.2<br>(0.157±0.008) | 5.0±0.2<br>(0.197±0.008) | 5.0±0.2<br>(0.197±0.008) | 5.9±0.3<br>(0.232±0.012) | 7.0±0.3<br>(0.276±0.012)   | 9.0±0.2<br>(0.354±0.008)  |                |
| W                   | 6.1±0.3<br>(0.240±0.012)   | 7.5±0.3<br>(0.295±0.012) | 4.0±0.2<br>(0.157±0.008) | 5.0±0.2<br>(0.197±0.008) | 5.0±0.2<br>(0.197±0.008) | 6.1±0.3<br>(0.240±0.012) | 7.5±0.3<br>(0.295±0.012)   | 10.6±0.2<br>(0.417±0.008) |                |
| H(max.)             | 2.8<br>(0.110)             | 3.2<br>(0.126)           | 1.8<br>(0.071)           | 3.0<br>(0.118)           | 2.0<br>(0.079)           | 2.8<br>(0.110)           | 3.2<br>(0.126)             | 6.0<br>(0.236)            | 5.0<br>(0.197) |
| a                   | 2.0±0.3<br>(0.079±0.012)   | 2.0±0.3<br>(0.079±0.012) | 1.1±0.1<br>(0.043±0.004) | 1.3±0.1<br>(0.051±0.004) | 1.3±0.1<br>(0.051±0.004) | 2.0±0.3<br>(0.079±0.012) | 2.0±0.3<br>(0.079±0.012)   | 1.6±0.2<br>(0.063±0.008)  |                |
| b                   | 4.2±0.3<br>(0.165±0.012)   | 5.7±0.3<br>(0.224±0.012) | 4.5±0.2<br>(0.177±0.008) | 5.8±0.3<br>(0.228±0.012) | 5.8±0.3<br>(0.228±0.012) | 4.2±0.3<br>(0.165±0.012) | 5.7±0.3<br>(0.224±0.012)   | 5.1±0.2<br>(0.201±0.008)  |                |

Unit : mm (inch)

## 推奨ランドパターン Recommended Land Patterns



Unit : mm

## 概略バリエーション AVAILABLE INDUCTANCE RANGE

| Type              | N05D           |                         | N06D           |                         | NP03S          |                         | NP04S          |                         | NP04SZ         | NP05DZ                  |            | NP06DZ                  |            | N08DP                   |                |                         |       |      |      |      |
|-------------------|----------------|-------------------------|----------------|-------------------------|----------------|-------------------------|----------------|-------------------------|----------------|-------------------------|------------|-------------------------|------------|-------------------------|----------------|-------------------------|-------|------|------|------|
| 高さ記号<br>(min.)    | B<br>(2.8max.) |                         | B<br>(3.2max.) |                         | B<br>(1.8max.) |                         | A<br>(3.0max.) | B<br>(2.0max.)          | B<br>(2.0max.) | B<br>(2.8max.)          |            | B<br>(3.2max.)          |            | A<br>(6.0max.)          | B<br>(5.0max.) |                         |       |      |      |      |
| Inductance<br>(H) | Rdc<br>(Ω)     | I <sub>max</sub><br>(A) | Rdc<br>(Ω)     | I <sub>max</sub><br>(A) | Rdc<br>(Ω)     | I <sub>max</sub><br>(A) | Rdc<br>(Ω)     | I <sub>max</sub><br>(A) | Rdc<br>(Ω)     | I <sub>max</sub><br>(A) | Rdc<br>(Ω) | I <sub>max</sub><br>(A) | Rdc<br>(Ω) | I <sub>max</sub><br>(A) | Rdc<br>(Ω)     | I <sub>max</sub><br>(A) |       |      |      |      |
| 1μ                | 0.021          | 3.7                     | 0.021          | 3.9                     | 0.023          | 2.5                     | 0.036          | 1.3                     | 0.030          | 3.0                     | 0.019      | 4.2                     | 0.019      | 4.6                     | 0.028          | 3.9                     | 0.023 | 4.0  |      |      |
| 10μ               | 0.1            | 1.6                     | 0.079          | 1.7                     | 0.12           | 0.8                     | 0.052          | 0.9                     | 0.13           | 1.2                     | 0.062      | 1.4                     | 0.075      | 2.0                     | 0.066          | 2.2                     | 0.069 | 2.2  |      |      |
| 100μ              | 0.83           | 0.55                    | 0.68           | 0.6                     | 0.43           | 0.45                    | 0.16           | 0.44                    | 0.32           | 0.38                    | 0.37       | 0.64                    | 0.84       | 0.45                    | 0.70           | 0.64                    | 0.35  | 1.05 | 0.49 | 0.82 |
| 1000μ             |                |                         | 8.2            | 0.16                    |                |                         |                |                         |                |                         |            |                         | 7.1        | 0.18                    | 3.1            | 0.34                    | 4.4   | 0.27 |      |      |

セレクションガイド  
Selection Guide

アイテム一覧  
Part Numbers

特性図  
Electrical Characteristics

梱包  
Packaging

信頼性  
Reliability Data

使用上の注意  
Precautions



etc

NP03SBシールドタイプ Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[mΩ] |        | 定格電流 ※)<br>Rated current<br>[A]        |  | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|----------------------------------|--------|--|--|-------------------------------------|
|                     |   |                                     |   |  | (max.)                           | (typ.) | 直流重畳許容電流<br>Saturation current<br>Idc1 | 温度上昇許容電流<br>Temperature rise current<br>Idc2 |                                     |
| NP03SB 1R0M         | RoHS  | 1.0                                 | ±20%                                      | 60   | 27                               | 23     | 2.60                                   | 2.50   | 1kHz                                |
| NP03SB 1R5M         | RoHS  | 1.5                                 |   | 52   | 32                               | 27     | 2.20                                   | 2.30   |                                     |
| NP03SB 2R0M         | RoHS  | 2.0                                 |   | 45   | 38                               | 32     | 1.90                                   | 2.00   |                                     |
| NP03SB 2R7M         | RoHS  | 2.7                                 |   | 39   | 44                               | 37     | 1.60                                   | 1.80   |                                     |
| NP03SB 3R3M         | RoHS  | 3.3                                 |   | 33   | 50                               | 42     | 1.30                                   | 1.60   |                                     |
| NP03SB 4R7M         | RoHS  | 4.7                                 |   | 30   | 56                               | 47     | 1.20                                   | 1.50   |                                     |
| NP03SB 6R8M         | RoHS  | 6.8                                 |   | 24   | 100                              | 84     | 1.00                                   | 1.10   |                                     |
| NP03SB 100M         | RoHS  | 10                                  |   | 20   | 120                              | 100    | 0.80                                   | 1.00   |                                     |
| NP03SB 150M         | RoHS  | 15                                  |   | 19   | 270                              | 230    | 0.66                                   | 0.70   |                                     |
| NP03SB 220M         | RoHS  | 22                                  |   | 14   | 340                              | 290    | 0.54                                   | 0.60   |                                     |
| NP03SB 330M         | RoHS  | 33                                  | 10  | 430  | 360                              | 0.45   | 0.50                                   |  |                                     |

NP04SAシールドタイプ Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[mΩ] |        | 定格電流 ※)<br>Rated current<br>[A]        |  | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|----------------------------------|--------|--|--|-------------------------------------|
|                     |   |                                     |   |  | (max.)                           | (typ.) | 直流重畳許容電流<br>Saturation current<br>Idc1 | 温度上昇許容電流<br>Temperature rise current<br>Idc2 |                                     |
| NP04SA 100M         | RoHS  | 10                                  | ±20%                                      | 20   | 52                               | 45     | 0.90                                   | 2.20   | 1kHz                                |
| NP04SA 220M         | RoHS  | 22                                  |   | 13   | 110                              | 90     | 0.53                                   | 1.50   |                                     |
| NP04SA 330M         | RoHS  | 33                                  |   | 12   | 160                              | 130    | 0.44                                   | 1.20   |                                     |

NP04SBシールドタイプ Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[mΩ] |        | 定格電流 ※)<br>Rated current<br>[A]        |  | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|----------------------------------|--------|--|--|-------------------------------------|
|                     |   |                                     |   |  | (max.)                           | (typ.) | 直流重畳許容電流<br>Saturation current<br>Idc1 | 温度上昇許容電流<br>Temperature rise current<br>Idc2 |                                     |
| NP04SB 3R3N         | RoHS  | 3.3                                 | ±30%                                      | 40   | 36                               | 30     | 1.30                                   | 2.60   | 1kHz                                |
| NP04SB 4R7N         | RoHS  | 4.7                                 |   | 30   | 50                               | 33     | 1.20                                   | 2.30   |                                     |
| NP04SB 6R8N         | RoHS  | 6.8                                 |   | 27   | 53                               | 43     | 1.05                                   | 2.00   |                                     |
| NP04SB 100M         | RoHS  | 10                                  | ±20%                                      | 19   | 66                               | 54     | 0.90                                   | 1.90   |                                     |
| NP04SB 150M         | RoHS  | 15                                  |   | 15   | 120                              | 100    | 0.62                                   | 1.40   |                                     |
| NP04SB 220M         | RoHS  | 22                                  |   | 12   | 150                              | 120    | 0.51                                   | 1.20   |                                     |
| NP04SB 330M         | RoHS  | 33                                  |   | 10   | 260                              | 210    | 0.42                                   | 1.10   |                                     |
| NP04SB 470M         | RoHS  | 47                                  |   | 8  | 320                              | 270    | 0.38                                   | 0.80   |                                     |

NP04SZシールドタイプ Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[mΩ] |        | 定格電流 ※)<br>Rated current<br>[A]        |  | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|----------------------------------|--------|--|--|-------------------------------------|
|                     |   |                                     |   |  | (max.)                           | (typ.) | 直流重畳許容電流<br>Saturation current<br>Idc1 | 温度上昇許容電流<br>Temperature rise current<br>Idc2 |                                     |
| NP04SZB 1R0N        | RoHS  | 1.0                                 | ±30%                                      | 96   | 30                               | 21     | 4.00                                   | 3.20   | 1kHz                                |
| NP04SZB 1R5N        | RoHS  | 1.5                                 |   | 72   | 35                               | 25     | 3.30                                   | 2.80   |                                     |
| NP04SZB 2R2N        | RoHS  | 2.2                                 |   | 60   | 42                               | 30     | 2.70                                   | 2.50   |                                     |
| NP04SZB 2R7N        | RoHS  | 2.7                                 |   | 52   | 46                               | 33     | 2.50                                   | 2.30   |                                     |
| NP04SZB 3R3N        | RoHS  | 3.3                                 |   | 30   | 60                               | 40     | 2.20                                   | 2.00   |                                     |
| NP04SZB 4R7N        | RoHS  | 4.7                                 |   | 27   | 100                              | 75     | 1.80                                   | 1.60   |                                     |
| NP04SZB 6R8N        | RoHS  | 6.8                                 |   | 19   | 120                              | 90     | 1.50                                   | 1.40   |                                     |
| NP04SZB 100M        | RoHS  | 10                                  | ±20%                                      | 15   | 130                              | 100    | 1.30                                   | 1.20   |                                     |
| NP04SZB 150M        | RoHS  | 15                                  |   | 12   | 250                              | 180    | 0.95                                   | 0.95   |                                     |
| NP04SZB 220M        | RoHS  | 22                                  |   | 10   | 300                              | 210    | 0.77                                   | 0.77   |                                     |
| NP04SZB 300M        | RoHS  | 30                                  |   | 8.5  | 370                              | 270    | 0.64                                   | 0.68   |                                     |

※) 直流重畳許容電流(Idc1)は、直流重畳によるインダクタンス低下が30%以内となる直流電流値 (at 20℃)  
The saturation current value(Idc1) is the DC current value having inductance decrease down to 30%. (at 20℃)

※) 温度上昇許容電流(Idc2)は、温度上昇が40℃となる直流電流値 (at 20℃)  
The temperature rise current value(Idc2) is the DC current value having temperature increase up to 40℃. (at 20℃)

※) 定格電流値は直流重畳許容電流、または温度上昇許容電流をいずれも満足する直流電流値  
The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

N05DB 非シールドタイプ Non-Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[Ω]<br>(max.) | 定格電流<br>Rated<br>current<br>[A]<br>(max.) | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|---|---|-------------------------------------|
| N 05DB 1R0M         | RoHS  | 1.0                                 | ±20%                                      | 85   | 0.021                                     | 3.7                                       | 1kHz                                |
| N 05DB 1R5M         | RoHS  | 1.5                                 |   | 69   | 0.025                                     | 3.2                                       |                                     |
| N 05DB 2R2M         | RoHS  | 2.2                                 |   | 51   | 0.032                                     | 2.9                                       |                                     |
| N 05DB 3R3M         | RoHS  | 3.3                                 |   | 45   | 0.040                                     | 2.5                                       |                                     |
| N 05DB 4R7M         | RoHS  | 4.7                                 |   | 35   | 0.049                                     | 2.2                                       |                                     |
| N 05DB 6R8M         | RoHS  | 6.8                                 |   | 30   | 0.070                                     | 2.1                                       |                                     |
| N 05DB 100K         | RoHS  | 10                                  | ±10%                                      | 25   | 0.10                                      | 1.6                                       |                                     |
| N 05DB 150K         | RoHS  | 15                                  |   | 24   | 0.16                                      | 1.40                                      |                                     |
| N 05DB 220K         | RoHS  | 22                                  |   | 18   | 0.22                                      | 1.20                                      |                                     |
| N 05DB 330K         | RoHS  | 33                                  |   | 14   | 0.35                                      | 0.80                                      |                                     |
| N 05DB 470K         | RoHS  | 47                                  |   | 12   | 0.43                                      | 0.75                                      |                                     |
| N 05DB 680K         | RoHS  | 68                                  |   | 9.7  | 0.66                                      | 0.65                                      |                                     |
| N 05DB 101K         | RoHS  | 100                                 |   | 8.3  | 0.83                                      | 0.55                                      |                                     |

NP05DZBシールドタイプ Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[mΩ]<br>(max.) | 定格電流 ※)<br>Rated current<br>[A]        |  | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|--|--|--|-------------------------------------|
|                     |   |                                     |   |  |  | 直流重畳許容電流<br>Saturation current<br>Idc1 | 温度上昇許容電流<br>Temperature rise current<br>Idc2 |                                     |
| NP05DZB 1R0M        | RoHS  | 1.0                                 | ±20%                                      | 86   | 19   | 4.20                                   | 4.50   | 1kHz                                |
| NP05DZB 1R5M        | RoHS  | 1.5                                 |   | 68   | 23   | 3.70                                   | 4.20   |                                     |
| NP05DZB 2R2M        | RoHS  | 2.2                                 |   | 54   | 26   | 3.00                                   | 3.70   |                                     |
| NP05DZB 3R3M        | RoHS  | 3.3                                 |   | 41   | 31   | 2.40                                   | 3.20   |                                     |
| NP05DZB 4R7M        | RoHS  | 4.7                                 |   | 34   | 38   | 2.00                                   | 3.00   |                                     |
| NP05DZB 6R8M        | RoHS  | 6.8                                 |   | 26   | 53   | 1.70                                   | 2.40   |                                     |
| NP05DZB 100M        | RoHS  | 10                                  |   | 25   | 62   | 1.40                                   | 2.10   |                                     |
| NP05DZB 150M        | RoHS  | 15                                  |   | 20   | 97   | 1.10                                   | 1.70   |                                     |
| NP05DZB 220M        | RoHS  | 22                                  |   | 16   | 150  | 0.90                                   | 1.26   |                                     |
| NP05DZB 330M        | RoHS  | 33                                  |   | 13   | 240  | 0.76                                   | 1.08   |                                     |
| NP05DZB 470M        | RoHS  | 47                                  |   | 11   | 400  | 0.66                                   | 0.77   |                                     |
| NP05DZB 680M        | RoHS  | 68                                  |   | 9.5  | 460  | 0.54                                   | 0.68   |                                     |
| NP05DZB 101M        | RoHS  | 100                                 |   | 7.7  | 840  | 0.45                                   | 0.49   |                                     |

- ※) 直流重畳許容電流(Idc1)は、直流重畳によるインダクタンス低下が30%以内となる直流電流値 (at 20℃)  
The saturation current value(Idc1) is the DC current value having inductance decrease down to 30%. (at 20℃)
- ※) 温度上昇許容電流(Idc2)は、温度上昇が40℃となる直流電流値 (at 20℃)  
The temperature rise current value(Idc2) is the DC current value having temperature increase up to 40℃. (at 20℃)
- ※) 定格電流値は直流重畳許容電流、または温度上昇許容電流をいずれも満足する直流電流値  
The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

N06DB 非シールドタイプ Non-Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[Ω]<br>(max.) | 定格電流<br>Rated<br>current<br>[A]<br>(max.) | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|---|---|-------------------------------------|
| N 06D B1R0M         | RoHS  | 1.0                                 | ±20%                                      | 87   | 0.021                                     | 3.9                                       | 1kHz                                |
| N 06D B2R2M         | RoHS  | 2.2                                 |   | 53   | 0.029                                     | 3.2                                       |                                     |
| N 06D B4R7M         | RoHS  | 4.7                                 |   | 33   | 0.046                                     | 2.5                                       |                                     |
| N 06D B100K         | RoHS  | 10                                  | ±10%                                      | 22   | 0.079                                     | 1.7                                       |                                     |
| N 06D B150K         | RoHS  | 15                                  |   | 18   | 0.12                                      | 1.3                                       |                                     |
| N 06D B220K         | RoHS  | 22                                  |   | 13   | 0.17                                      | 1.1                                       |                                     |
| N 06D B330K         | RoHS  | 33                                  |   | 9.8  | 0.25                                      | 0.95                                      |                                     |
| N 06D B470K         | RoHS  | 47                                  |   | 8.8  | 0.32                                      | 0.80                                      |                                     |
| N 06D B680K         | RoHS  | 68                                  |   | 8.1  | 0.45                                      | 0.70                                      |                                     |
| N 06D B101K         | RoHS  | 100                                 |   | 7.9  | 0.68                                      | 0.60                                      |                                     |
| N 06D B151K         | RoHS  | 150                                 |   | 6.0  | 1.0                                       | 0.48                                      |                                     |
| N 06D B221K         | RoHS  | 220                                 |   | 5.2  | 1.4                                       | 0.40                                      |                                     |
| N 06D B331K         | RoHS  | 330                                 |   | 4.4  | 2.3                                       | 0.32                                      |                                     |
| N 06D B471K         | RoHS  | 470                                 | 3.4                                       | 3.6  | 0.25                                      |   |                                     |
| N 06D B681K         | RoHS  | 680                                 | 2.6                                       | 4.6  | 0.21                                      |   |                                     |
| N 06D B102J         | RoHS  | 1000                                | ±5%                                       | 2.1  | 8.2                                       | 0.16                                      |                                     |

NP06DZB シールドタイプ Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[mΩ]<br>(max.) | 定格電流 ※)<br>Rated current<br>[A]        |  | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|--|--|--|-------------------------------------|
|                     |   |                                     |   |  |  | 直流重畳許容電流<br>Saturation current<br>Idc1 | 温度上昇許容電流<br>Temperature rise current<br>Idc2 |                                     |
| NP06DZB 1R0M        | RoHS  | 1.0                                 | ±20%                                      | 90   | 19   | 6.90                                   | 4.60   | 1kHz                                |
| NP06DZB 1R5M        | RoHS  | 1.5                                 |   | 71   | 23   | 5.80                                   | 4.00   |                                     |
| NP06DZB 2R2M        | RoHS  | 2.2                                 |   | 53   | 26   | 5.10                                   | 3.60   |                                     |
| NP06DZB 3R3M        | RoHS  | 3.3                                 |   | 39   | 34   | 3.60                                   | 3.30   |                                     |
| NP06DZB 4R7M        | RoHS  | 4.7                                 |   | 36   | 38   | 3.00                                   | 3.00   |                                     |
| NP06DZB 6R8M        | RoHS  | 6.8                                 |   | 28   | 52   | 2.80                                   | 2.50   |                                     |
| NP06DZB 100M        | RoHS  | 10                                  |   | 20   | 75   | 2.10                                   | 2.00   |                                     |
| NP06DZB 150M        | RoHS  | 15                                  |   | 17   | 110  | 1.80                                   | 1.70   |                                     |
| NP06DZB 220M        | RoHS  | 22                                  |   | 14   | 160  | 1.50                                   | 1.40   |                                     |
| NP06DZB 330M        | RoHS  | 33                                  |   | 10   | 210  | 1.30                                   | 1.10   |                                     |
| NP06DZB 470M        | RoHS  | 47                                  |   | 9.3  | 310  | 1.03                                   | 0.91   |                                     |
| NP06DZB 680M        | RoHS  | 68                                  |   | 8.0  | 450  | 0.90                                   | 0.73   |                                     |
| NP06DZB 101M        | RoHS  | 100                                 |   | 6.7  | 700  | 0.65                                   | 0.64   |                                     |
| NP06DZB 151M        | RoHS  | 150                                 |   | 5.3  | 890  | 0.59                                   | 0.56   |                                     |
| NP06DZB 221M        | RoHS  | 220                                 |   | 4.8  | 1500                                       | 0.49                                   | 0.42   |                                     |
| NP06DZB 331M        | RoHS  | 330                                 |   | 3.7  | 2500                                       | 0.39                                   | 0.31   |                                     |
| NP06DZB 471M        | RoHS  | 470                                 |   | 3.0  | 3000                                       | 0.31                                   | 0.29   |                                     |
| NP06DZB 681M        | RoHS  | 680                                 |   | 2.5  | 5500                                       | 0.23                                   | 0.23   |                                     |
| NP06DZB 102M        | RoHS  | 1000                                | 2.0                                       | 7100   | 0.18                                       | 0.18                                   |  |                                     |

※) 直流重畳許容電流(Idc1)は、直流重畳によるインダクタンス低下が30%以内となる直流電流値 (at 20℃)  
The saturation current value(Idc1) is the DC current value having inductance decrease down to 30%. (at 20℃)

※) 温度上昇許容電流(Idc2)は、温度上昇が40℃となる直流電流値 (at 20℃)  
The temperature rise current value(Idc2) is the DC current value having temperature increase up to 40℃. (at 20℃)

※) 定格電流値は直流重畳許容電流、または温度上昇許容電流をいずれも満足する直流電流値  
The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

N08DPA 非シールドタイプ Non-Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[Ω]<br>(max.) | 定格電流<br>Rated<br>current<br>[A]<br>(max.) | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|---|---|-------------------------------------|
| N 08DPA1R0M         | RoHS  | 1.0                                 | ±20%                                      | 86   | 0.028                                     | 3.9                                       | 1kHz                                |
| N 08DPA1R5M         | RoHS  | 1.5                                 |   | 69   | 0.030                                     | 3.4                                       |                                     |
| N 08DPA2R2M         | RoHS  | 2.2                                 |   | 58   | 0.036                                     | 3.2                                       |                                     |
| N 08DPA3R3M         | RoHS  | 3.3                                 |   | 50   | 0.039                                     | 3.0                                       |                                     |
| N 08DPA4R7M         | RoHS  | 4.7                                 |   | 30   | 0.047                                     | 2.6                                       |                                     |
| N 08DPA6R8M         | RoHS  | 6.8                                 |   | 21   | 0.057                                     | 2.4                                       |                                     |
| N 08DPA100K         | RoHS  | 10                                  |   | 18   | 0.066                                     | 2.2                                       |                                     |
| N 08DPA120K         | RoHS  | 12                                  | ±10%                                      | 16   | 0.077                                     | 2.1                                       |                                     |
| N 08DPA150K         | RoHS  | 15                                  |   | 14   | 0.087                                     | 2.0                                       |                                     |
| N 08DPA180K         | RoHS  | 18                                  |   | 13   | 0.092                                     | 1.9                                       |                                     |
| N 08DPA220K         | RoHS  | 22                                  |   | 11   | 0.11                                      | 1.8                                       |                                     |
| N 08DPA270K         | RoHS  | 27                                  |   | 10   | 0.12                                      | 1.6                                       |                                     |
| N 08DPA330K         | RoHS  | 33                                  |   | 9.5  | 0.14                                      | 1.55                                      |                                     |
| N 08DPA390K         | RoHS  | 39                                  |   | 8.9  | 0.15                                      | 1.5                                       |                                     |
| N 08DPA470K         | RoHS  | 47                                  |   | 8.6  | 0.17                                      | 1.4                                       |                                     |
| N 08DPA560K         | RoHS  | 56                                  |   | 8.3  | 0.19                                      | 1.35                                      |                                     |
| N 08DPA680K         | RoHS  | 68                                  |   | 7.9  | 0.23                                      | 1.3                                       |                                     |
| N 08DPA820K         | RoHS  | 82                                  |   | 7.3  | 0.30                                      | 1.1                                       |                                     |
| N 08DPA101K         | RoHS  | 100                                 |   | 6.7  | 0.35                                      | 1.05                                      |                                     |
| N 08DPA121K         | RoHS  | 120                                 |   | 6.5  | 0.40                                      | 0.95                                      |                                     |
| N 08DPA151K         | RoHS  | 150                                 |   | 6.0  | 0.55                                      | 0.80                                      |                                     |
| N 08DPA181K         | RoHS  | 180                                 |   | 4.9  | 0.62                                      | 0.76                                      |                                     |
| N 08DPA221K         | RoHS  | 220                                 |   | 4.1  | 0.80                                      | 0.66                                      |                                     |
| N 08DPA271K         | RoHS  | 270                                 |   | 3.4  | 0.90                                      | 0.63                                      |                                     |
| N 08DPA331K         | RoHS  | 330                                 |   | 3.2  | 1.1                                       | 0.59                                      |                                     |
| N 08DPA391K         | RoHS  | 390                                 |   | 2.9  | 1.2                                       | 0.54                                      |                                     |
| N 08DPA471K         | RoHS  | 470                                 |   | 2.6  | 1.5                                       | 0.50                                      |                                     |
| N 08DPA561K         | RoHS  | 560                                 | 2.4                                       | 1.7  | 0.45                                      |   |                                     |
| N 08DPA681K         | RoHS  | 680                                 | 2.2                                       | 2.4  | 0.38                                      |   |                                     |
| N 08DPA821K         | RoHS  | 820                                 | 1.9                                       | 2.6  | 0.36                                      |   |                                     |
| N 08DPA102J         | RoHS  | 1000                                | ±5%                                       | 1.8  | 3.1                                       | 0.34                                      |                                     |

N08DPB 非シールドタイプ Non-Shielded type

| 形名<br>Ordering code | EHS<br>(Environmental<br>Hazardous<br>Substances) | 公称<br>インダクタンス<br>Inductance<br>[μH] | インダクタンス<br>許容差<br>Inductance<br>Tolerance | 自己共振<br>周波数<br>Self-resonant<br>frequency<br>[MHz]<br>(min.) | 直流抵抗<br>DC<br>Resistance<br>[Ω]<br>(max.) | 定格電流<br>Rated<br>current<br>[A]<br>(max.) | 測定<br>周波数<br>Measuring<br>frequency |
|---------------------|---|-------------------------------------|---|--|---|---|-------------------------------------|
| N 08DPB1R0M         | RoHS  | 1.0                                 | ±20%                                      | 98   | 0.023                                     | 4.0                                       | 1kHz                                |
| N 08DPB1R5M         | RoHS  | 1.5                                 |   | 73   | 0.028                                     | 3.7                                       |                                     |
| N 08DPB2R2M         | RoHS  | 2.2                                 |   | 56   | 0.032                                     | 3.4                                       |                                     |
| N 08DPB3R3M         | RoHS  | 3.3                                 |   | 42   | 0.037                                     | 3.2                                       |                                     |
| N 08DPB4R7M         | RoHS  | 4.7                                 |   | 32   | 0.047                                     | 2.7                                       |                                     |
| N 08DPB6R8M         | RoHS  | 6.8                                 |   | 26   | 0.057                                     | 2.4                                       |                                     |
| N 08DPB100K         | RoHS  | 10                                  |   | 21   | 0.069                                     | 2.2                                       |                                     |
| N 08DPB120K         | RoHS  | 12                                  | ±10%                                      | 20   | 0.074                                     | 2.1                                       |                                     |
| N 08DPB150K         | RoHS  | 15                                  |   | 17   | 0.087                                     | 2.0                                       |                                     |
| N 08DPB180K         | RoHS  | 18                                  |   | 16   | 0.099                                     | 1.9                                       |                                     |
| N 08DPB220K         | RoHS  | 22                                  |   | 14   | 0.12                                      | 1.8                                       |                                     |
| N 08DPB270K         | RoHS  | 27                                  |   | 13   | 0.15                                      | 1.5                                       |                                     |
| N 08DPB330K         | RoHS  | 33                                  |   | 12   | 0.18                                      | 1.4                                       |                                     |
| N 08DPB390K         | RoHS  | 39                                  |   | 11   | 0.19                                      | 1.3                                       |                                     |
| N 08DPB470K         | RoHS  | 47                                  |   | 10   | 0.22                                      | 1.2                                       |                                     |
| N 08DPB560K         | RoHS  | 56                                  |   | 9.2  | 0.29                                      | 1.1                                       |                                     |
| N 08DPB680K         | RoHS  | 68                                  |   | 8.3  | 0.34                                      | 1.0                                       |                                     |
| N 08DPB820K         | RoHS  | 82                                  |   | 7.6  | 0.39                                      | 0.94                                      |                                     |
| N 08DPB101K         | RoHS  | 100                                 |   | 7.3  | 0.49                                      | 0.82                                      |                                     |
| N 08DPB121K         | RoHS  | 120                                 |   | 6.8  | 0.54                                      | 0.79                                      |                                     |
| N 08DPB151K         | RoHS  | 150                                 |   | 6.2  | 0.66                                      | 0.75                                      |                                     |
| N 08DPB181K         | RoHS  | 180                                 |   | 5.8  | 0.75                                      | 0.68                                      |                                     |
| N 08DPB221K         | RoHS  | 220                                 |   | 5.0  | 0.92                                      | 0.63                                      |                                     |
| N 08DPB271K         | RoHS  | 270                                 |   | 4.5  | 1.1                                       | 0.56                                      |                                     |
| N 08DPB331K         | RoHS  | 330                                 |   | 4.2  | 1.5                                       | 0.48                                      |                                     |
| N 08DPB391K         | RoHS  | 390                                 |   | 4.0  | 1.7                                       | 0.45                                      |                                     |
| N 08DPB471K         | RoHS  | 470                                 |   | 3.0  | 2.1                                       | 0.41                                      |                                     |
| N 08DPB561K         | RoHS  | 560                                 | 2.7                                       | 2.4  | 0.38                                      |   |                                     |
| N 08DPB681K         | RoHS  | 680                                 | 2.5                                       | 2.7  | 0.36                                      |   |                                     |
| N 08DPB821K         | RoHS  | 820                                 | 2.4                                       | 3.1  | 0.33                                      |   |                                     |
| N 08DPB102J         | RoHS  | 1000                                | ±5%                                       | 2.1  | 4.4                                       | 0.27                                      |                                     |