

## FEATURES

- SHIELDED POWER INDUCTOR
- HIGH CURRENT (UP TO 7.8 AMPS)
- 30% LOWER DCR THAN NPIS\_LS SERIES
- ROBUST CONSTRUCTION
- TAPED AND REELED FOR AUTOMATIC INSERTION
- FOR USE IN DC/DC CONVERTERS

**RoHS Compliant**  
includes all homogeneous materials



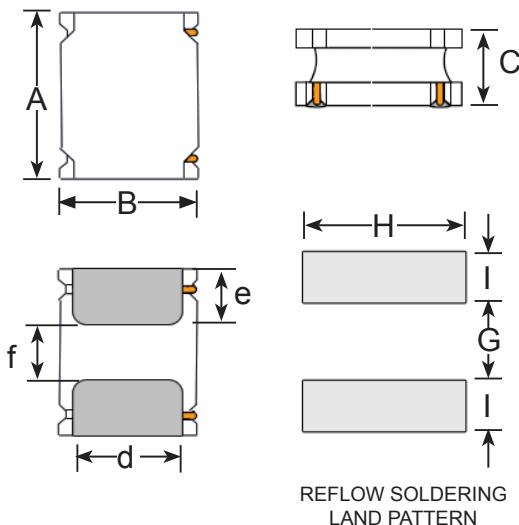
\*See Part Number System for Details

## CHARACTERISTICS

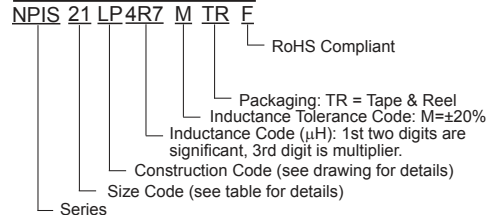
|                                     |  |                   |                   |                   |                  |
|-------------------------------------|--|-------------------|-------------------|-------------------|------------------|
| Case Size                           | NPIS26LP   | NPIS22LP          | NPIS20LP          | NPIS21LP          | NPIS32LP         |
| Inductance Range                    | 0.16 ~ 10 $\mu$ H  | 0.16 ~ 33 $\mu$ H | 0.24 ~ 22 $\mu$ H | 0.16 ~ 22 $\mu$ H | 1.0 ~ 22 $\mu$ H |
| Case Size                           | NPIS35LP   | NPIS41LP          | NPIS48LP          | NPIS83LP          |                  |
| Inductance Range                    | 0.47 ~ 22 $\mu$ H  | 0.47 ~ 10 $\mu$ H | 1.0 ~ 330 $\mu$ H | 1.0 ~ 47 $\mu$ H  |                  |
| Ambient Operating Temperature Range | -40°C ~ +125°C (including self-heating)                  |                   |                   |                   |                  |
| Temperature Rise at Irms            | Maximum +40°C Temperature Rise                           |                   |                   |                   |                  |
| Inductance Change at Isat           | Maximum -30% Inductance Drop From Initial Measured Value |                   |                   |                   |                  |
| Inductance Tolerance                | $\pm$ 20% (M)  |                   |                   |                   |                  |
| Resistance to Solder Heat           | +260°C for 10 seconds                                    |                   |                   |                   |                  |

## DIMENSIONS (mm)

| Series   | A             | B             | C        | d             | e              | f              | G    | I    | H   |
|----------|---------------|---------------|----------|---------------|----------------|----------------|------|------|-----|
| NPIS26LP | 2.0 $\pm$ 0.2 | 1.6 $\pm$ 0.2 | 1.0 Max. | 1.2 $\pm$ 0.2 | 0.60 $\pm$ 0.2 | 0.80 $\pm$ 0.2 | 0.7  | 0.7  | 1.7 |
| NPIS22LP | 2.0 $\pm$ 0.1 | 2.0 $\pm$ 0.1 | 1.2 Max. | 1.5 $\pm$ 0.2 | 0.60 $\pm$ 0.2 | 0.80 $\pm$ 0.2 | 0.65 | 0.7  | 2   |
| NPIS20LP | 2.5 $\pm$ 0.2 | 2.0 $\pm$ 0.2 | 1.0 Max. | 1.5 $\pm$ 0.2 | 0.80 $\pm$ 0.2 | 0.80 $\pm$ 0.2 | 0.8  | 0.85 | 2   |
| NPIS21LP | 2.5 $\pm$ 0.2 | 2.0 $\pm$ 0.2 | 1.2 Max. | 1.5 $\pm$ 0.2 | 0.80 $\pm$ 0.2 | 0.80 $\pm$ 0.2 | 0.8  | 0.85 | 2   |
| NPIS32LP | 3.0 $\pm$ 0.2 | 3.0 $\pm$ 0.2 | 1.2 Max. | 2.5 $\pm$ 0.2 | 0.75 $\pm$ 0.2 | 1.5 $\pm$ 0.2  | 1.5  | 0.8  | 2.7 |
| NPIS35LP | 3.0 $\pm$ 0.2 | 3.0 $\pm$ 0.2 | 1.5 Max. | 2.5 $\pm$ 0.2 | 0.75 $\pm$ 0.2 | 1.5 $\pm$ 0.2  | 1.5  | 0.8  | 2.7 |
| NPIS41LP | 4.0 $\pm$ 0.2 | 4.0 $\pm$ 0.2 | 1.2 Max. | 3.3 $\pm$ 0.2 | 0.95 $\pm$ 0.2 | 2.1 $\pm$ 0.2  | 1.9  | 1.1  | 3.7 |
| NPIS48LP | 4.0 $\pm$ 0.2 | 4.0 $\pm$ 0.2 | 1.8 Max. | 3.3 $\pm$ 0.2 | 0.95 $\pm$ 0.2 | 2.1 $\pm$ 0.2  | 1.9  | 1.1  | 3.7 |
| NPIS83LP | 8.0 $\pm$ 0.3 | 8.0 $\pm$ 0.3 | 3.0 Max. | 6.3 $\pm$ 0.3 | 2.00 $\pm$ 0.3 | 4.0 $\pm$ 0.3  | 3.8  | 2.2  | 7.5 |



## PART NUMBER SYSTEM



## NPIS26LP Size

| Series          | Standard Values - Case Size 26 (2.0×1.6×1.0mm) |                 |         |       |             |             |
|-----------------|--|-----------------|---------|-------|-------------|-------------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) |       | Isat (Amps) | Irms (Amps) |
|                 |  |                 | Max.    | Typ.  | Max.        | Max.        |
| NPIS26LPR16MTRF | 0.16 ± 20%                                     | 1MHz, 1V        | 0.031   | 0.026 | 4.3         | 3.2         |
| NPIS26LPR24MTRF | 0.24 ± 20%                                     |                 | 0.040   | 0.033 | 3.7         | 2.9         |
| NPIS26LPR33MTRF | 0.33 ± 20%                                     |                 | 0.040   | 0.033 | 2.5         | 2.9         |
| NPIS26LPR47MTRF | 0.47 ± 20%                                     |                 | 0.059   | 0.049 | 2.3         | 2.35        |
| NPIS26LPR68MTRF | 0.68 ± 20%                                     |                 | 0.076   | 0.063 | 1.95        | 2.05        |
| NPIS26LP1R0MTRF | 1.0 ± 20%                                      |                 | 0.114   | 0.095 | 1.65        | 1.45        |
| NPIS26LP1R5MTRF | 1.5 ± 20%                                      |                 | 0.174   | 0.145 | 1.35        | 1.25        |
| NPIS26LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.264   | 0.22  | 1.20        | 1.10        |
| NPIS26LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.335   | 0.279 | 0.90        | 0.88        |
| NPIS26LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.479   | 0.399 | 0.70        | 0.74        |
| NPIS26LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.816   | 0.68  | 0.60        | 0.52        |
| NPIS26LP100MTRF | 10 ± 20%                                       |                 | 1.02    | 0.85  | 0.50        | 0.45        |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.

## NPIS22LP Size

| Series          | Standard Values - Case Size 22 (2.0×2.0×1.2mm) |                 |         |       |             |             |
|-----------------|--|-----------------|---------|-------|-------------|-------------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) |       | Isat (Amps) | Irms (Amps) |
|                 |  |                 | Max.    | Typ.  | Max.        | Max.        |
| NPIS22LPR16MTRF | 0.16 ± 20%                                     | 1MHz, 1V        | 0.031   | 0.026 | 5.2         | 2.5         |
| NPIS22LPR24MTRF | 0.24 ± 20%                                     |                 | 0.042   | 0.035 | 4.7         | 2.2         |
| NPIS22LPR33MTRF | 0.33 ± 20%                                     |                 | 0.042   | 0.035 | 3.5         | 2.2         |
| NPIS22LPR47MTRF | 0.47 ± 20%                                     |                 | 0.05    | 0.042 | 3.55        | 2           |
| NPIS22LPR68MTRF | 0.68 ± 20%                                     |                 | 0.06    | 0.05  | 2.95        | 1.8         |
| NPIS22LP1R0MTRF | 1 ± 20%  |                 | 0.088   | 0.073 | 2.7         | 1.5         |
| NPIS22LP1R5MTRF | 1.5 ± 20%                                      |                 | 0.112   | 0.093 | 2.0         | 1.3         |
| NPIS22LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.127   | 0.106 | 1.4         | 1.2         |
| NPIS22LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.276   | 0.23  | 1.2         | 0.85        |
| NPIS22LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.294   | 0.245 | 0.97        | 0.82        |
| NPIS22LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.479   | 0.399 | 0.82        | 0.64        |
| NPIS22LP100MTRF | 10 ± 20%                                       |                 | 0.785   | 0.654 | 0.72        | 0.49        |
| NPIS22LP150MTRF | 15 ± 20%                                       |                 | 1.368   | 1.14  | 0.55        | 0.38        |
| NPIS22LP220MTRF | 22 ± 20%                                       |                 | 1.68    | 1.4   | 0.40        | 0.35        |
| NPIS22LP330MTRF | 33 ± 20%                                       |                 | 2.16    | 1.8   | 0.35        | 0.30        |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.



## NPIS20LP Size

| Series          | Standard Values - Case Size 20 (2.5×2.0×1.0mm) |                 |         |       |             |             |           |
|-----------------|--|-----------------|---------|-------|-------------|-------------|-----------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) |       | Isat (Amps) | Irms (Amps) | SRF (MHz) |
|                 |  |                 | Max.    | Typ.  | Max.        | Max.        | Min.      |
| NPIS20LPR24MTRF | 0.24 ± 20%                                     | 1MHz, 1V        | 0.034   | 0.028 | 3.6         | 2.75        | 360       |
| NPIS20LPR33MTRF | 0.33 ± 20%                                     |                 | 0.043   | 0.036 | 3.8         | 2.4         | 270       |
| NPIS20LPR47MTRF | 0.47 ± 20%                                     |                 | 0.044   | 0.037 | 2.4         | 2.4         | 170       |
| NPIS20LPR68MTRF | 0.68 ± 20%                                     |                 | 0.061   | 0.051 | 2.75        | 2.1         | 110       |
| NPIS20LP1R0MTRF | 1.0 ± 20%                                      |                 | 0.08    | 0.067 | 2.05        | 1.8         | 84        |
| NPIS20LP1R5MTRF | 1.5 ± 20%                                      |                 | 0.108   | 0.09  | 1.7         | 1.55        | 60        |
| NPIS20LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.137   | 0.114 | 1.55        | 1.4         | 56        |
| NPIS20LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.228   | 0.17  | 1.1         | 1.1         | 39        |
| NPIS20LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.323   | 0.269 | 1.0         | 0.91        | 28        |
| NPIS20LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.451   | 0.376 | 0.82        | 0.76        | 25        |
| NPIS20LP100MTRF | 10 ± 20%                                       |                 | 0.584   | 0.487 | 0.65        | 0.67        | 20        |
| NPIS20LP150MTRF | 15 ± 20%                                       |                 | 0.954   | 0.795 | 0.55        | 0.50        | 19        |
| NPIS20LP220MTRF | 22 ± 20%                                       |                 | 1.548   | 1.29  | 0.45        | 0.40        | 15        |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.

## NPIS21LP Size

| Series          | Standard Values - Case Size 21 (2.5×2.0×1.2mm) |                 |         |       |             |             |           |
|-----------------|--|-----------------|---------|-------|-------------|-------------|-----------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) |       | Isat (Amps) | Irms (Amps) | SRF (MHz) |
|                 |  |                 | Max.    | Typ.  | Max.        | Max.        | Min.      |
| NPIS21LPR16MTRF | 0.16 ± 20%                                     | 1MHz, 1V        | 0.022   | 0.018 | 6.5         | 4.05        | 380       |
| NPIS21LPR24MTRF | 0.24 ± 20%                                     |                 | 0.022   | 0.018 | 4.0         | 4.05        | 260       |
| NPIS21LPR33MTRF | 0.33 ± 20%                                     |                 | 0.029   | 0.024 | 4.0         | 3.35        | 230       |
| NPIS21LPR47MTRF | 0.47 ± 20%                                     |                 | 0.036   | 0.03  | 3.7         | 3.0         | 170       |
| NPIS21LPR68MTRF | 0.68 ± 20%                                     |                 | 0.061   | 0.051 | 3.0         | 2.1         | 150       |
| NPIS21LP1R0MTRF | 1.0 ± 20%                                      |                 | 0.044   | 0.037 | 1.7         | 2.2         | 85        |
| NPIS21LP1R2MTRF | 1.2 ± 20%                                      |                 | 0.078   | 0.065 | 2.2         | 1.95        | 75        |
| NPIS21LP1R5MTRF | 1.5 ± 20%                                      |                 | 0.078   | 0.065 | 2.0         | 1.95        | 75        |
| NPIS21LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.096   | 0.08  | 1.8         | 1.8         | 55        |
| NPIS21LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.144   | 0.12  | 1.15        | 1.4         | 43        |
| NPIS21LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.21    | 0.175 | 1.1         | 1.12        | 36        |
| NPIS21LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.36    | 0.3   | 0.80        | 0.95        | 25        |
| NPIS21LP100MTRF | 10 ± 20%                                       |                 | 0.522   | 0.435 | 0.70        | 0.79        | 21        |
| NPIS21LP150MTRF | 15 ± 20%                                       |                 | 1.0     | 0.83  | 0.65        | 0.57        | 18        |
| NPIS21LP180MTRF | 18 ± 20%                                       |                 | 1.0     | 0.83  | 0.65        | 0.63        | 14        |
| NPIS21LP220MTRF | 22 ± 20%                                       |                 | 1.09    | 0.91  | 0.45        | 0.55        | 11        |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.



## NPIS32LP Size

| Series          | Standard Values - Case Size 32 (3.0x3.0x1.2mm) |                 |         |       |             |             |           |
|-----------------|--|-----------------|---------|-------|-------------|-------------|-----------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) |       | Isat (Amps) | Irms (Amps) | SRF (MHz) |
|                 |  |                 | Max.    | Typ.  | Max.        | Max.        | Min.      |
| NPIS32LP1R0MTRF | 1.0 ± 20%                                      | 100KHz, 1V      | 0.04    | 0.032 | 2.2         | 2.3         | 74        |
| NPIS32LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.09    | 0.075 | 1.5         | 1.4         | 51        |
| NPIS32LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.134   | 0.112 | 1.23        | 1.4         | 62        |
| NPIS32LP100MTRF | 10 ± 20%                                       |                 | 0.372   | 0.310 | 0.75        | 0.75        | 22        |
| NPIS32LP220MTRF | 22 ± 20%                                       |                 | 0.84    | 0.70  | 0.50        | 0.50        | 14        |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.

## NPIS35LP Size

| Series          | Standard Values - Case Size 35 (3.0x3.0x1.5mm) |                 |         |       |             |             |           |
|-----------------|--|-----------------|---------|-------|-------------|-------------|-----------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) |       | Isat (Amps) | Irms (Amps) | SRF (MHz) |
|                 |  |                 | Max.    | Typ.  | Max.        | Max.        | Min.      |
| NPIS35LPR47MTRF | 0.47 ± 20%                                     | 100KHz, 1V      | 0.022   | .0218 | 2.4         | 3.0         | 216       |
| NPIS35LP1R0MTRF | 1.0 ± 20%                                      |                 | 0.04    | 0.033 | 2.7         | 2.2         | 92        |
| NPIS35LP1R5MTRF | 1.5 ± 20%                                      |                 | 0.048   | 0.04  | 2.0         | 2.0         | 70        |
| NPIS35LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.06    | 0.05  | 1.5         | 1.8         | 55        |
| NPIS35LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.084   | 0.07  | 1.3         | 1.5         | 51        |
| NPIS35LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.155   | 0.096 | 1.1         | 1.3         | 35        |
| NPIS35LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.144   | 0.12  | 0.80        | 0.90        | 27        |
| NPIS35LP100MTRF | 10 ± 20%                                       |                 | 0.276   | 0.23  | 0.75        | 0.84        | 21        |
| NPIS35LP150MTRF | 15 ± 20%                                       |                 | 0.36    | 0.30  | 0.60        | 0.73        | 18        |
| NPIS35LP220MTRF | 22 ± 20%                                       |                 | 0.54    | 0.45  | 0.52        | 0.60        | 14        |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.



## NPIS41LP Size

| Series          | Standard Values - Case Size 41 (4.0×4.0×1.2mm) |                 |         |       |             |             |           |
|-----------------|--|-----------------|---------|-------|-------------|-------------|-----------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) |       | Isat (Amps) | Irms (Amps) | SRF (MHz) |
|                 |  |                 | Max.    | Typ.  | Max.        | Max.        | Min.      |
| NPIS41LPR47MTRF | 0.47 ± 20%                                     | 100KHz, 1V      | 0.032   | 0.02  | 3.5         | 2.9         | 193       |
| NPIS41LPR82MTRF | 0.82 ± 20%                                     |                 | 0.042   | 0.035 | 3.0         | 2.5         | 121       |
| NPIS41LP1R0MTRF | 1.0 ± 20%                                      |                 | 0.050   | 0.042 | 2.8         | 2.2         | 100       |
| NPIS41LP1R5MTRF | 1.5 ± 20%                                      |                 | 0.05    | 0.042 | 2.1         | 2.2         | 72        |
| NPIS41LP1R8MTRF | 1.8 ± 20%                                      |                 | 0.066   | 0.055 | 2.1         | 2.0         | 73        |
| NPIS41LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.066   | 0.055 | 1.7         | 2.0         | 61        |
| NPIS41LP2R7MTRF | 2.7 ± 20%                                      |                 | 0.084   | 0.070 | 1.9         | 1.7         | 57        |
| NPIS41LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.084   | 0.070 | 1.4         | 1.7         | 55        |
| NPIS41LP3R6MTRF | 3.6 ± 20%                                      |                 | 0.09    | 0.075 | 1.2         | 1.7         | 49        |
| NPIS41LP4R3MTRF | 4.3 ± 20%                                      |                 | 0.108   | 0.09  | 1.2         | 1.5         | 42        |
| NPIS41LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.108   | 0.09  | 1.2         | 1.8         | 39        |
| NPIS41LP5R1MTRF | 5.1 ± 20%                                      |                 | 0.132   | 0.110 | 1.2         | 1.4         | 35        |
| NPIS41LP5R6MTRF | 5.6 ± 20%                                      |                 | 0.132   | 0.110 | 1.1         | 1.4         | 35        |
| NPIS41LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.150   | 0.125 | 0.9         | 1.3         | 33        |
| NPIS41LP100MTRF | 10 ± 20%                                       |                 | 0.204   | 0.170 | 0.8         | 1.1         | 27        |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.

## NPIS48LP Size

| Series          | Standard Values - Case Size 48 (4.0×4.0×1.8mm) |                 |         |             |             |           |
|-----------------|--|-----------------|---------|-------------|-------------|-----------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) | Isat (Amps) | Irms (Amps) | SRF (MHz) |
|                 |  |                 | ± 20%   | Max.        | Max.        | Min.      |
| NPIS48LP1R0MTRF | 1.0 ± 20%                                      | 100KHz, 1V      | 0.027   | 4.00        | 3.20        | 90        |
| NPIS48LP1R5MTRF | 1.5 ± 20%                                      |                 | 0.031   | 3.60        | 2.95        | 70        |
| NPIS48LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.042   | 3.00        | 2.20        | 60        |
| NPIS48LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.055   | 2.30        | 2.00        | 45        |
| NPIS48LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.070   | 2.00        | 1.70        | 35        |
| NPIS48LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.098   | 1.60        | 1.45        | 30        |
| NPIS48LP100MTRF | 10 ± 20%                                       |                 | 0.150   | 1.30        | 1.20        | 25        |
| NPIS48LP150MTRF | 15 ± 20%                                       |                 | 0.210   | 1.10        | 0.85        | 18        |
| NPIS48LP220MTRF | 22 ± 20%                                       |                 | 0.290   | 0.90        | 0.70        | 15        |
| NPIS48LP330MTRF | 33 ± 20%                                       |                 | 0.460   | 0.70        | 0.55        | 12        |
| NPIS48LP470MTRF | 47 ± 20%                                       |                 | 0.620   | 0.57        | 0.65        | 11        |
| NPIS48LP680MTRF | 68 ± 20%                                       |                 | 0.810   | 0.53        | 0.55        | 7.1       |
| NPIS48LP101MTRF | 100 ± 20%                                      |                 | 1.30    | 0.49        | 0.45        | 5.2       |
| NPIS48LP151MTRF | 150 ± 20%                                      |                 | 2.60    | 0.41        | 0.33        | 5.1       |
| NPIS48LP221MTRF | 220 ± 20%                                      |                 | 3.20    | 0.33        | 0.25        | 4.2       |
| NPIS48LP331MTRF | 330 ± 20%                                      | 4.90            | 0.26    | 0.22        | 3.2         |           |

Maximum +40°C temperature rise at Irms. Maximum -30% inductance drop from initial measured value at Isat.

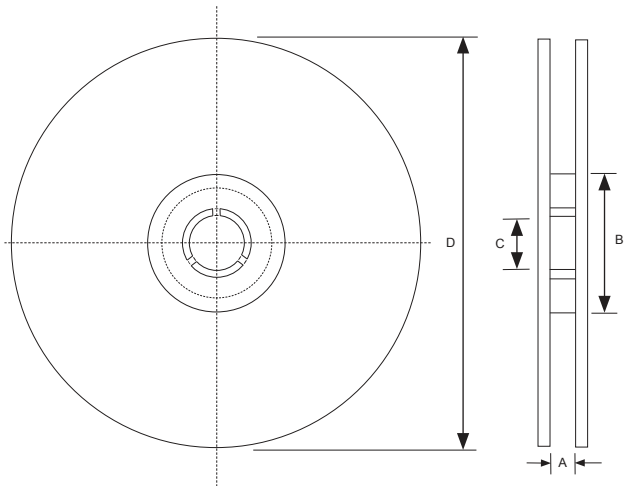
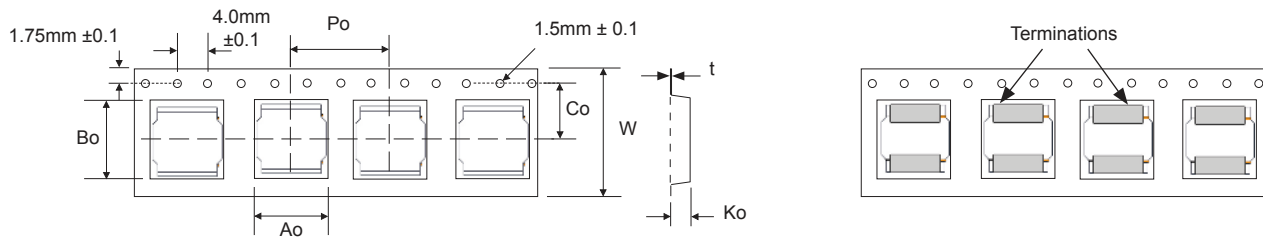


## NPIS83LP Size

| Series          | Standard Values - Case Size 83 (8.0×8.0×3.0mm) |                 |         |             |             |           |
|-----------------|--|-----------------|---------|-------------|-------------|-----------|
|                 | Inductance (μH)                                | Test Conditions | DCR (Ω) | Isat (Amps) | Irms (Amps) | SRF (MHz) |
|                 |  |                 | ± 20%   | Max.        | Max.        | Min.      |
| NPIS83LP1R0YTRF | 1.0 ± 30%                                      | 100KHz, 1V      | 0.009   | 7.80        | 6.20        | 90        |
| NPIS83LP1R5YTRF | 1.5 ± 30%                                      |                 | 0.012   | 6.20        | 5.30        | 70        |
| NPIS83LP2R2MTRF | 2.2 ± 20%                                      |                 | 0.015   | 4.90        | 4.80        | 60        |
| NPIS83LP3R3MTRF | 3.3 ± 20%                                      |                 | 0.019   | 4.20        | 4.30        | 45        |
| NPIS83LP4R7MTRF | 4.7 ± 20%                                      |                 | 0.022   | 3.60        | 4.00        | 35        |
| NPIS83LP6R8MTRF | 6.8 ± 20%                                      |                 | 0.029   | 3.00        | 3.40        | 30        |
| NPIS83LP100MTRF | 10 ± 20%                                       |                 | 0.033   | 2.40        | 3.00        | 25        |
| NPIS83LP150MTRF | 15 ± 20%                                       |                 | 0.060   | 2.00        | 2.20        | 18        |
| NPIS83LP220MTRF | 22 ± 20%                                       |                 | 0.070   | 1.75        | 1.90        | 15        |
| NPIS83LP330MTRF | 33 ± 20%                                       |                 | 0.120   | 1.30        | 1.50        | 12        |
| NPIS83LP470MTRF | 47 ± 20%                                       |                 | 0.170   | 1.10        | 1.30        | 11        |

Maximum +40°C temperature rise at I<sub>rms</sub>. Maximum -30% inductance drop from initial measured value at I<sub>sat</sub>.

| Case Size | CARRIER TAPING DIMENSIONS (mm) AND REEL QUANTITY |             |             |            |            |            |             |          |
|-----------|--|-------------|-------------|------------|------------|------------|-------------|----------|
|           | Ao   | Bo          | Ko          | Co         | W          | Po         | t           | Quantity |
| NPIS26LP  | 1.90 ± 0.05                                      | 2.20 ± 0.05 | 1.2 ± 0.05  | 3.5 ± 0.05 | 8.0 ± 0.1  | 4.0 ± 0.1  | 0.25 ± 0.02 | 2,000    |
| NPIS22LP  | 2.35 ± 0.05                                      | 2.35 ± 0.05 | 1.4 ± 0.05  | 3.5 ± 0.05 | 8.0 ± 0.1  | 4.0 ± 0.1  | 0.25 ± 0.03 | 2,000    |
| NPIS20LP  | 2.45 ± 0.05                                      | 2.75 ± 0.05 | 1.2 ± 0.05  | 3.5 ± 0.05 | 8.0 ± 0.1  | 4.0 ± 0.1  | 0.25 ± 0.03 | 2,000    |
| NPIS21LP  | 2.45 ± 0.05                                      | 2.75 ± 0.05 | 1.55 ± 0.05 | 3.5 ± 0.05 | 8.0 ± 0.1  | 4.0 ± 0.1  | 0.25 ± 0.03 | 2,000    |
| NPIS32LP  | 3.3 ± 0.1  | 3.3 ± 0.1   | 1.6 ± 0.1   | 3.5 ± 0.1  | 8.0 ± 0.3  | 4.0 ± 0.1  | 0.25 ± 0.03 | 2,000    |
| NPIS35LP  |  |             | 1.9 ± 0.1   |            |            |            | 0.25 ± 0.03 | 2,000    |
| NPIS41LP  | 4.3 ± 0.1  | 4.3 ± 0.1   | 1.6 ± 0.1   | 5.5 ± 0.1  | 12.0 ± 0.3 | 8.0 ± 0.1  | 0.35 ± 0.03 | 4,500    |
| NPIS48LP  |  |             | 2.1 ± 0.1   |            |            |            |             | 3,000    |
| NPIS83LP  | 8.35 ± 0.1                                       | 8.35 ± 0.1  | 3.4 ± 0.1   | 7.5 ± 0.1  | 16.0 ± 0.3 | 12.0 ± 0.1 | 0.4 ± 0.03  | 1,500    |



| Tape Width | REEL DIMENSIONS (mm) |           |            |           |
|------------|----------------------|-----------|------------|-----------|
|            | A(mm)                | B(mm)     | C(mm)      | D(mm)     |
| NPIS26LP   | 8.4 +1.5/-0          | 58 ± 2.0  | 13.5 ± 0.2 | 178 ± 2.0 |
| NPIS22LP   |                      |           |            |           |
| NPIS20LP   |                      |           |            |           |
| NPIS21LP   |                      |           |            |           |
| NPIS32LP   |                      |           |            |           |
| NPIS35LP   | 12.4 +0.2/-0         | 100 ± 2.0 | 13.0 +2/-0 | 330 ± 2.0 |
| NPIS41LP   |                      |           |            |           |
| NPIS48LP   |                      |           |            |           |
| NPIS83LP   | 16.4 +0.2/-0         | 100 ± 2.0 | 13.0 +2/-0 | 330 ± 2.0 |

