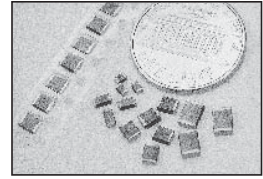


FEATURES

- RUGGED CONSTRUCTION IN STANDARD EIA SIZES
- EFFECTIVE EM/RFI SUPPRESSION UP TO 1 Ghz
- CURRENT RATINGS UP TO 5 AMPS (STYLE 2)
- 100% CLOSED MAGNETIC CIRCUIT, AVOIDS CROSSTALK
- BOTH FLOW AND REFLOW SOLDERING APPLICABLE
- OPERATING TEMPERATURE RANGE: -40°C TO +125°C

**RoHS
Compliant**
includes all homogeneous materials
*See Part Number System for Details



STANDARD VALUES AND CASE SIZES (mm)

| EIA Size | NIC Part Number | Impedance at 100MHz Ω ($\pm 25\%$ Tol.) | DC Resistance Max. (Ω) | DC Current Max. (mA) | Style Code | A (mm) | B (mm) | C (mm) | D (mm) |
|-------------------|-------------------|---|---------------------------------|----------------------|------------|----------------|-----------------|----------------|-----------------|
| 0201 | NCB0201N100TR050F | 10 | 0.15 | 500 | 1 | 0.6 \pm 0.03 | 0.3 \pm 0.03 | 0.3 \pm 0.03 | 0.15 \pm 0.05 |
| | NCB0201N330TR030F | 33 | 0.5 | 300 | | | | | |
| | NCB0201N560TR030F | 56 | 0.6 | 300 | | | | | |
| | NCB0201N800TR050F | 80 | 0.5 | 500 | | | | | |
| | NCB0201N121TR030F | 120 | 0.7 | 300 | | | | | |
| NCB0201N241TR020F | 240 | 1.0 | 200 | | | | | | |
| 0402 | NCB0402P300TR030F | 30 | 0.2 | 300 | 1 | 1.0 \pm 0.5 | 0.50 \pm 0.15 | 0.5 \pm 0.15 | 0.25 \pm 0.15 |
| | NCB0402P600TR030F | 60 | 0.25 | 300 | | | | | |
| | NCB0402P121TR010F | 120 | 0.3 | 100 | | | | | |
| | NCB0402P151TR010F | 151 | 0.3 | 100 | | | | | |
| | NCB0402P221TR010F | 220 | 0.4 | 100 | | | | | |
| | NCB0402P301TR005F | 300 | 0.75 | 50 | | | | | |
| | NCB0402P331TR010F | 330 | 0.5 | 100 | | | | | |
| | NCB0402P471TR010F | 470 | 0.65 | 100 | | | | | |
| NCB0402P601TR010F | 600 | 0.8 | 100 | | | | | | |
| 0603 | NCB0603R100TR070F | 10 | 0.2 | 700 | 1 | 1.6 \pm 0.2 | 0.8 \pm 0.15 | 0.8 \pm 0.15 | 0.4 \pm 0.2 |
| | NCB0603R300TR070F | 30 | 0.2 | 700 | | | | | |
| | NCB0603R600TR070F | 60 | 0.2 | 700 | | | | | |
| | NCB0603R800TR020F | 80 | 0.3 | 200 | | | | | |
| | NCB0603R121TR060F | 120 | 0.25 | 600 | | | | | |
| | NCB0603R141TR020F | 140 | 0.3 | 200 | | | | | |
| | NCB0603R151TR060F | 150 | 0.25 | 600 | | | | | |
| | NCB0603R221TR055F | 220 | 0.3 | 550 | | | | | |
| | NCB0603R301TR050F | 300 | 0.35 | 500 | | | | | |
| | NCB0603R451TR010F | 450 | 0.7 | 100 | | | | | |
| | NCB0603R471TR035F | 470 | 0.45 | 350 | | | | | |
| | NCB0603R601TR035F | 600 | 0.5 | 350 | | | | | |
| | NCB0603R751TR020F | 750 | 0.7 | 200 | | | | | |
| | NCB0603R801TR010F | 800 | 0.9 | 100 | | | | | |
| | NCB0603R102TR020F | 1000 | 0.7 | 200 | | | | | |
| NCB0603R152TR030F | 1500 | 1.0 | 300 | | | | | | |
| NCB0603R202TR015F | 2000 | 1.2 | 150 | | | | | | |
| 0805 | NCB0805A070TR060F | 7 | 0.1 | 600 | 1 | 2.0 \pm 0.2 | 1.25 \pm 0.2 | 0.9 \pm 0.2 | 0.5 \pm 0.3 |
| | NCB0805A110TR090F | 11 | 0.1 | 900 | | | | | |
| | NCB0805A170TR060F | 17 | 0.1 | 600 | | | | | |
| | NCB0805A260TR060F | 26 | 0.1 | 600 | | | | | |
| | NCB0805A300TR060F | 30 | 0.1 | 600 | | | | | |
| | NCB0805A320TR050F | 32 | 0.3 | 500 | | | | | |
| | NCB0805A400TR060F | 40 | 0.1 | 600 | | | | | |
| | NCB0805A600TR090F | 60 | 0.1 | 900 | | | | | |
| | NCB0805A800TR040F | 80 | 0.4 | 400 | | | | | |
| | NCB0805A900TR060F | 90 | 0.1 | 600 | | | | | |
| | NCB0805A121TR080F | 120 | 0.2 | 800 | | | | | |
| | NCB0805A151TR080F | 150 | 0.2 | 800 | | | | | |
| | NCB0805A221TR075F | 220 | 0.3 | 750 | | | | | |
| | NCB0805A301TR070F | 300 | 0.3 | 700 | | | | | |
| | NCB0805A401TR020F | 400 | 0.9 | 200 | | | | | |
| | NCB0805A471TR070F | 470 | 0.35 | 700 | | | | | |
| | NCB0805A601TR050F | 600 | 0.4 | 500 | | | | | |
| | NCB0805A801TR045F | 800 | 0.4 | 450 | | | | | |
| NCB0805A102TR040F | 1000 | 0.45 | 400 | | | | | | |

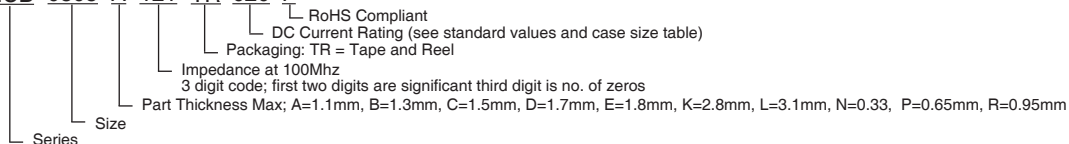


STANDARD VALUES AND CASE SIZES (mm)

| EIA Size | NIC P/N | Impedance at 100MHz Ω ($\pm 25\%$ Tol.) | DC Resistance Max. (Ω) | DC Current Max. (mA) | Style Code | A (mm) | B (mm) | C (mm) | D (mm) |
|-------------------|-------------------|---|---------------------------------|----------------------|------------|----------------|----------------|---------------|---------------|
| 0805 | NCB0805A152TR035F | 1500 | 0.5 | 350 | 1 | 2.0 \pm 0.2 | 1.25 \pm 0.2 | 0.9 \pm 0.2 | 0.5 \pm 0.3 |
| | NCB0805A202TR025F | 2000 | 0.6 | 250 | | | | | |
| | NCB0805A222TR010F | 2200 | 0.75 | 100 | | | | | |
| | NCB0805A232TR020F | 2300 | 0.8 | 200 | | | | | |
| | NCB0805A252TR020F | 2500 | 0.75 | 200 | | | | | |
| NCB0805A272TR015F | 2700 | 1.1 | 150 | | | | | | |
| 1206 | NCB1206B190TR050F | 19 | 0.15 | 500 | 1 | 3.2 \pm 0.2 | 1.6 \pm 0.2 | 1.1 \pm 0.2 | 0.5 \pm 0.3 |
| | NCB1206B260TR050F | 26 | 0.15 | 500 | | | | | |
| | NCB1206B310TR050F | 31 | 0.2 | 500 | | | | | |
| | NCB1206B320TR050F | 32 | 0.15 | 500 | | | | | |
| | NCB1206B420TR050F | 42 | 0.2 | 500 | | | | | |
| | NCB1206B500TR050F | 50 | 0.2 | 500 | | | | | |
| | NCB1206B600TR040F | 60 | 0.2 | 400 | | | | | |
| | NCB1206B700TR050F | 70 | 0.2 | 500 | | | | | |
| | NCB1206B900TR050F | 90 | 0.2 | 500 | | | | | |
| | NCB1206B101TR090F | 100 | 0.15 | 900 | | | | | |
| | NCB1206B121TR090F | 120 | 0.15 | 900 | | | | | |
| | NCB1206B151TR090F | 150 | 0.15 | 900 | | | | | |
| | NCB1206B201TR020F | 200 | 0.5 | 200 | | | | | |
| | NCB1206B221TR070F | 220 | 0.35 | 700 | | | | | |
| | NCB1206B301TR070F | 300 | 0.35 | 700 | | | | | |
| | NCB1206B401TR020F | 400 | 0.5 | 200 | | | | | |
| | NCB1206B471TR040F | 470 | 0.35 | 400 | | | | | |
| | NCB1206B501TR020F | 500 | 0.5 | 200 | | | | | |
| | NCB1206B601TR040F | 600 | 0.4 | 400 | | | | | |
| | NCB1206B801TR030F | 800 | 0.6 | 300 | | | | | |
| NCB1206B102TR030F | 1000 | 0.6 | 300 | | | | | | |
| NCB1206B122TR010F | 1200 | 1 | 100 | | | | | | |
| NCB1206B152TR030F | 1500 | 0.7 | 300 | | | | | | |
| NCB1206B202TR030F | 2000 | 1.5 | 300 | | | | | | |
| 1210 | NCB1210C310TR040F | 31 | 0.3 | 400 | 1 | 3.2 \pm 0.2 | 2.5 \pm 0.2 | 1.3 \pm 0.2 | 0.5 \pm 0.3 |
| | NCB1210C320TR040F | 32 | 0.3 | 400 | | | | | |
| | NCB1210C520TR040F | 52 | 0.3 | 400 | | | | | |
| | NCB1210C600TR040F | 60 | 0.3 | 400 | | | | | |
| | NCB1210C800TR040F | 80 | 0.3 | 400 | | | | | |
| | NCB1210C900TR040F | 90 | 0.3 | 400 | | | | | |
| NCB1210C202TR010F | 2000 | 1.5 | 100 | | | | | | |
| 1806 | NCB1806E600TR040F | 60 | 0.3 | 400 | 1 | 4.5 \pm 0.25 | 1.6 \pm 0.2 | 1.6 \pm 0.2 | 0.5 \pm 0.3 |
| | NCB1806E800TR040F | 80 | 0.3 | 400 | | | | | |
| | NCB1806E101TR050F | 100 | 0.1 | 500 | | | | | |
| | NCB1806E151TR020F | 150 | 0.5 | 200 | | | | | |
| 1812 | NCB1812D700TR030F | 70 | 0.4 | 300 | 1 | 4.5 \pm 0.25 | 3.2 \pm 0.2 | 1.5 \pm 0.2 | 0.5 \pm 0.3 |
| | NCB1812D800TR030F | 80 | 0.4 | 300 | | | | | |
| | NCB1812D121TR050F | 120 | 0.3 | 500 | | | | | |
| | NCB1812D131TR030F | 130 | 0.4 | 300 | | | | | |

PART NUMBER SYSTEM

NCB 0805 A 121 TR 020 F



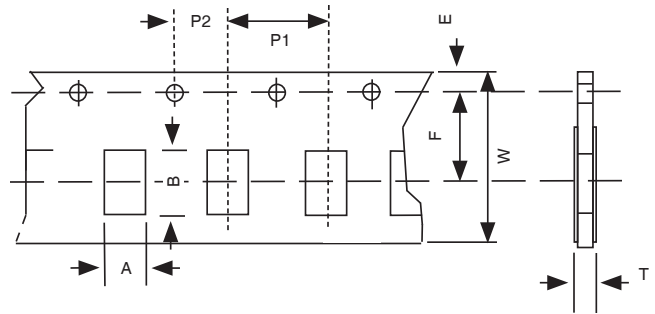
For Impedance (Z) over Frequency curves see www.RFpassives.com



TAPE DIMENSIONS (mm)

| Dimensions | NCB0201N | NCB0402P | NCB0603R | NCB0805A |
|------------|-------------|-------------|-------------|-------------|
| A | 0.38 ± 0.03 | 0.62 ± 0.03 | 1.05 ± 0.03 | 1.50 ± 0.05 |
| B | 0.68 ± 0.03 | 1.12 ± 0.03 | 1.85 ± 0.03 | 2.30 ± 0.05 |
| T | 0.44 ± 0.03 | 0.60 ± 0.03 | 0.95 ± 0.05 | 0.95 ± 0.05 |
| W | 8.0 ± 0.1 | | | |
| E | 1.75 ± 0.1 | | | |
| F | 3.5 ± 0.1 | | | |
| P1 | 2.0 ± 0.1 | | 4.0 ± 0.1 | |
| P2 | 2.0 ± 0.1 | | | |
| Chips/Reel | 10,000 | 10,000 | 4,000 | 4,000 |
| Fig. | 1 | 1 | 1 | 1 |

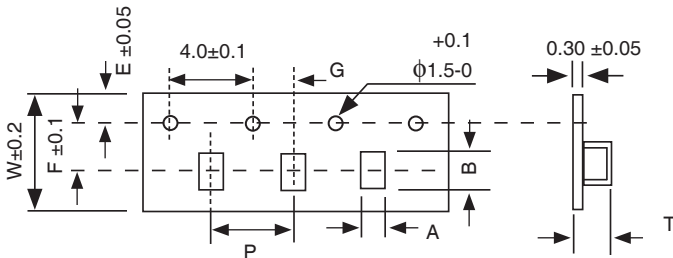
FIGURE 1 (PRESSED PAPER CARRIER)



TAPE DIMENSIONS (mm)

| Dimensions | NCB1206B | NCB1206E | NCB1210C | NCB1806E | NCB1812D | NCB1612K | NCB3312K | NCB3119L |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| A | 1.94 ± 0.1 | 1.94 ± 0.1 | 2.80 ± 0.1 | 1.94 ± 0.1 | 3.64 ± 0.1 | 3.65 ± 0.1 | 3.45 ± 0.1 | 5.25 ± 0.1 |
| B | 3.54 ± 0.1 | 3.64 ± 0.1 | 3.42 ± 0.1 | 4.94 ± 0.1 | 4.94 ± 0.1 | 5.40 ± 0.1 | 9.30 ± 0.1 | 8.75 ± 0.1 |
| T | 1.29 ± 0.05 | 1.90 ± 0.05 | 1.64 ± 0.05 | 1.90 ± 0.05 | 1.80 ± 0.05 | 3.05 ± 0.05 | 3.05 ± 0.05 | 3.70 ± 0.05 |
| W | 8.0 | | | 12.0 | | | 16.0 | |
| E | 1.75 | | | | 2.0 | | | |
| F | 3.5 | | | 5.5 | | | 7.5 | |
| G | 2.0 ± 0.05 | | | | | | 4.0 ± 0.05 | |
| P | 4.0 ± 0.1 | | | | 8.0 ± 0.1 | | | |
| Chips/Reel | 3,000 | 2,000 | 2,500 | 2,000 | 1,000 | 500 | 500 | 500 |
| Fig. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

FIGURE 2 (EMBOSSED PLASTIC CARRIER)



DIMENSIONS (mm)

| Size | A | B | C |
|------|------|------|------|
| 0201 | 0.30 | 0.32 | 0.25 |
| 0402 | 0.80 | 0.55 | 0.50 |
| 0603 | 1.00 | 0.60 | 0.80 |
| 0805 | 1.00 | 1.20 | 1.20 |
| 1206 | 1.00 | 1.80 | 2.00 |
| 1210 | 1.00 | 2.70 | 2.00 |
| 1806 | 1.05 | 1.80 | 3.30 |
| 1812 | 1.05 | 3.50 | 3.30 |
| 1612 | 1.70 | 2.00 | 2.20 |
| 3312 | 1.70 | 2.00 | 6.60 |
| 3119 | 1.70 | 2.00 | 5.80 |

REEL DIMENSIONS

| Dim | Size: 0201, 0402, 0603, 0805, 1206, 1210 | Size: 1806, 1812, 1612 | Size: 3312, 3319 |
|-----|--|------------------------|------------------|
| A | 178 ± 2.0 | | |
| B | 60 ± 1.0 | | |
| C | 13.0 ± 0.5 | | |
| D | 21.0 ± 0.8 | | |
| E | 2.0 ± 0.5 | | |
| W | 10.0 ± 1.0 | 14.0 ± 1.0 | 18.0 ± 1.0 |
| t | 2.0 ± 0.5 | | |
| R | 1.0 | | |

RECOMMENDED LAND PATTERN (mm)

