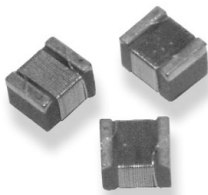


Type 3650 Series

Type 3650 Series



The 3650 Series is a new concept from Tyco, a range of inductors in values from 1.0 nanohenry to 4.7 microhenries. The 3650 is available in four package sizes and is designed for automatic placement.

Key Features

- Choice of Four Package Sizes
- Wire Wound Construction
- Smooth Top Aids Placement
- 1.0NH to 4.7mH Value Range
- Laboratory Design Kits Available
- High Q Factor
- High S.R.F.
- Standard Tolerances

Characteristics - Electrical
Type 36501E Series - 0402 Package

| Inductance Code | Inductance (nH) @ 250MHz | Tolerance (%) | Q Min. | S.R.F. Min. (GHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) | 900MHz | | 1.7GHz | |
|-----------------|--------------------------|---------------|--------|-------------------|-------------------|------------------|--------|--------|--------|--------|
| | | | | | | | L Typ. | Q Typ. | L Typ. | Q Typ. |
| 1N0 | 1.0 | 10 | 16 | 12.7 | 0.045 | 1360 | 1.02 | 77 | 1.02 | 69 |
| 1N9 | 1.9 | 10,5 | 16 | 11.3 | 0.070 | 1040 | 1.72 | 68 | 1.74 | 82 |
| 2N0 | 2.0 | 10,5 | 16 | 11.1 | 0.070 | 1040 | 1.93 | 54 | 1.93 | 75 |
| 2N2 | 2.2 | 10,5 | 19 | 10.8 | 0.070 | 960 | 2.19 | 59 | 2.23 | 100 |
| 2N4 | 2.4 | 10,5 | 15 | 10.5 | 0.070 | 790 | 2.24 | 51 | 2.27 | 68 |
| 2N7 | 2.7 | 10,5 | 16 | 10.4 | 0.120 | 640 | 2.23 | 42 | 2.25 | 61 |
| 3N3 | 3.3 | 10,5,2 | 19 | 7.00 | 0.066 | 840 | 3.10 | 65 | 3.12 | 87 |
| 3N6 | 3.6 | 10,5,2 | 19 | 6.80 | 0.066 | 840 | 3.56 | 45 | 3.62 | 71 |
| 3N9 | 3.9 | 10,5,2 | 19 | 5.80 | 0.066 | 840 | 3.89 | 50 | 4.00 | 75 |
| 4N3 | 4.3 | 10,5,2 | 18 | 6.00 | 0.091 | 700 | 4.19 | 47 | 4.30 | 71 |
| 4N7 | 4.7 | 10,5,2 | 15 | 4.70 | 0.130 | 640 | 4.55 | 48 | 4.68 | 68 |
| 5N1 | 5.1 | 10,5,2 | 20 | 4.80 | 0.083 | 800 | 5.15 | 56 | 5.25 | 82 |
| 5N6 | 5.6 | 10,5,2 | 20 | 4.80 | 0.083 | 760 | 5.16 | 54 | 5.28 | 81 |
| 6N2 | 6.2 | 10,5,2 | 20 | 4.80 | 0.083 | 760 | 6.16 | 52 | 6.37 | 76 |
| 6N8 | 6.8 | 10,5,2 | 20 | 4.80 | 0.083 | 680 | 6.56 | 63 | 6.93 | 78 |
| 7N5 | 7.5 | 10,5,2 | 22 | 4.80 | 0.104 | 680 | 7.91 | 60 | 8.22 | 88 |
| 8N2 | 8.2 | 10,5,2 | 22 | 4.40 | 0.104 | 680 | 8.50 | 57 | 8.85 | 84 |
| 8N7 | 8.7 | 10,5,2 | 18 | 4.10 | 0.200 | 480 | 8.78 | 54 | 9.21 | 73 |
| 9N0 | 9.0 | 10,5,2 | 22 | 4.16 | 0.104 | 680 | 9.07 | 62 | 9.53 | 78 |
| 9N5 | 9.5 | 10,5,2 | 18 | 4.00 | 0.200 | 480 | 9.42 | 54 | 9.98 | 69 |
| 10N | 10 | 10,5,2 | 21 | 3.90 | 0.195 | 480 | 9.8 | 50 | 10.1 | 67 |
| 11N | 11 | 10,5,2 | 24 | 3.68 | 0.120 | 640 | 10.7 | 52 | 11.2 | 78 |
| 12N | 12 | 10,5,2 | 24 | 3.60 | 0.120 | 640 | 11.9 | 53 | 12.7 | 71 |
| 13N | 13 | 10,5,2 | 24 | 3.45 | 0.210 | 440 | 13.4 | 51 | 14.6 | 57 |
| 15N | 15 | 10,5,2 | 24 | 3.28 | 0.172 | 560 | 14.6 | 55 | 15.5 | 77 |
| 16N | 16 | 10,5,2 | 24 | 3.10 | 0.220 | 560 | 16.6 | 46 | 18.8 | 47 |
| 18N | 18 | 10,5,2 | 24 | 3.10 | 0.230 | 420 | 18.3 | 57 | 20.28 | 62 |
| 19N | 19 | 10,5,2 | 24 | 3.04 | 0.202 | 480 | 19.1 | 50 | 21.1 | 67 |
| 20N | 20 | 10,5,2 | 25 | 3.00 | 0.250 | 420 | 20.7 | 52 | 23.66 | 53 |
| 22N | 22 | 10,5,2 | 25 | 2.80 | 0.300 | 400 | 23.2 | 53 | 26.75 | 53 |
| 23N | 23 | 10,5,2 | 22 | 2.72 | 0.300 | 400 | 23.8 | 49 | 26.9 | 64 |
| 24N | 24 | 10,5,2 | 25 | 2.70 | 0.300 | 400 | 25.1 | 51 | 29.5 | 50 |
| 27N | 27 | 10,5,2 | 24 | 2.48 | 0.300 | 400 | 28.7 | 49 | 33.5 | 63 |
| 30N | 30 | 10,5,2 | 25 | 2.35 | 0.350 | 400 | 31.1 | 46 | 38.5 | 39 |
| 33N | 33 | 10,5,2 | 24 | 2.35 | 0.350 | 400 | 34.9 | 31 | 41.74 | 32 |
| 36N | 36 | 10,5,2 | 24 | 2.32 | 0.440 | 320 | 39.5 | 44 | 48.4 | 53 |
| 39N | 39 | 10,5,2 | 25 | 2.10 | 0.550 | 200 | 41.7 | 47 | 50.23 | 45 |
| 40N | 40 | 10,5,2 | 24 | 2.24 | 0.440 | 320 | 39.0 | 44 | 47.4 | 33 |
| 43N | 43 | 10,5,2 | 25 | 2.03 | 0.810 | 100 | 45.8 | 46 | 61.55 | 34 |
| 47N | 47 | 10,5,2 | 20 | 2.10 | 0.830 | 150 | 50.0 | 38 | - | - |
| 51N | 51 | 10,5,2 | 25 | 1.75 | 0.820 | 100 | - | - | - | - |
| 56N | 56 | 10,5,2 | 22 | 1.76 | 0.970 | 100 | - | - | - | - |
| 68N | 68 | 10,5,2 | 22 | 1.62 | 1.120 | 100 | - | - | - | - |

Type 3650 Series

Characteristics - Electrical
Type 36501J Series - 0603 Package

| Inductance Code | Inductance (nH) @ 250MHz | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) | 900MHz | | 1.7GHz | | Colour Code |
|-----------------|--------------------------|---------------|--------|-------------------|-------------------|------------------|--------|--------|--------|--------|-------------|
| | | | | | | | L Typ. | Q Typ. | L Typ. | Q Typ. | |
| 1N6 | 1.6 | 10,5 | 16 | 12500 | 0.040 | 700 | 1.53 | 35 | 1.58 | 55 | Blue |
| 1N8 | 1.8 | 10,5 | 16 | 12500 | 0.045 | 700 | 1.63 | 35 | 1.66 | 50 | Black |
| 2N2 | 2.2 | 10,5 | 20 | 6000 | 0.100 | 700 | 2.18 | 41 | 2.20 | 64 | White |
| 3N3 | 3.3 | 10,5,2 | 22 | >6000 | 0.080 | 700 | 3.35 | 47 | 3.40 | 65 | Red |
| 3N6 | 3.6 | 10,5,2 | 22 | 5800 | 0.063 | 700 | 3.53 | 49 | 3.58 | 65 | Violet |
| 3N9 | 3.9 | 10,5,2 | 22 | >6000 | 0.080 | 700 | 3.95 | 49 | 3.96 | 67 | Brown |
| 4N3 | 4.3 | 10,5,2 | 22 | 5800 | 0.063 | 700 | 4.32 | 49 | 4.43 | 67 | Orange |
| 4N7 | 4.7 | 10,5,2 | 20 | 5800 | 0.120 | 700 | 4.65 | 53 | 4.80 | 67 | Violet |
| 5N1 | 5.1 | 10,5,2 | 20 | 5800 | 0.160 | 700 | 5.13 | 47 | 5.36 | 56 | Green |
| 5N6 | 5.6 | 10,5,2 | 20 | 5800 | 0.170 | 700 | 5.53 | 56 | 5.86 | 77 | Yellow |
| 6N8 | 6.8 | 10,5,2 | 27 | 5800 | 0.110 | 700 | 6.75 | 60 | 7.10 | 81 | Red |
| 7N5 | 7.5 | 10,5,2 | 27 | 4800 | 0.110 | 700 | 7.39 | 62 | 7.71 | 81 | Brown |
| 8N2 | 8.2 | 10,5,2 | 27 | 4800 | 0.110 | 700 | 8.25 | 64 | 8.40 | 81 | Green |
| 8N7 | 8.7 | 10,5,2 | 27 | 4800 | 0.110 | 700 | 8.84 | 62 | 9.38 | 58 | Yellow |
| 9N5 | 9.5 | 10,5,2 | 27 | 4800 | 0.130 | 700 | 9.64 | 59 | 10.5 | 61 | Blue |
| 10N | 10.0 | 10,5,2 | 31 | 4800 | 0.130 | 700 | 10.0 | 66 | 10.6 | 83 | Orange |
| 11N | 11.0 | 10,5,2 | 31 | 4000 | 0.086 | 700 | 11.3 | 53 | 12.1 | 56 | Grey |
| 12N | 12.0 | 10,5,2 | 35 | 4000 | 0.130 | 700 | 12.3 | 72 | 13.5 | 83 | Yellow |
| 15N | 15.0 | 10,5,2 | 35 | 4000 | 0.170 | 700 | 15.4 | 64 | 16.8 | 89 | Green |
| 16N | 16.0 | 10,5,2 | 35 | 3300 | 0.110 | 700 | 16.5 | 55 | 18.0 | 52 | White |
| 18N | 18.0 | 10,5,2 | 35 | 3100 | 0.170 | 700 | 18.7 | 70 | 21.4 | 69 | Blue |
| 22N | 22.0 | 10,5,2 | 38 | 3000 | 0.190 | 700 | 22.8 | 73 | 26.1 | 71 | Violet |
| 23N | 23.0 | 10,5,2 | 38 | 2850 | 0.190 | 700 | 24.1 | 71 | 28.0 | 71 | Orange |
| 24N | 24.0 | 10,5,2 | 36 | 2800 | 0.130 | 700 | 25.7 | 45 | 30.9 | 40 | Black |
| 27N | 27.0 | 10,5,2 | 40 | 2800 | 0.220 | 600 | 29.2 | 74 | 34.6 | 65 | Grey |
| 30N | 30.0 | 10,5,2 | 37 | 2800 | 0.150 | 600 | 31.4 | 47 | 39.8 | 28 | Brown |
| 33N | 33.0 | 10,5,2 | 40 | 2300 | 0.220 | 600 | 36.0 | 67 | 49.5 | 42 | White |
| 36N | 36.0 | 10,5,2 | 37 | 2300 | 0.250 | 600 | 39.1 | 47 | 48.9 | 24 | Red |
| 39N | 39.0 | 10,5,2 | 40 | 2200 | 0.250 | 600 | 42.7 | 60 | 60.2 | 40 | Black |
| 43N | 43.0 | 10,5,2 | 38 | 2000 | 0.280 | 600 | 46.9 | 44 | 60.3 | 21 | Orange |
| 47N | 47.0 | 10,5,2 | 38 | 2000 | 0.280 | 600 | 52.2 | 62 | 77.2 | 35 | Brown |
| 51N | 51.0 | 10,5,2 | 35 | 1900 | 0.280 | 600 | 55.5 | 69 | 82.2 | 34 | Blue |
| 56N | 56.0 | 10,5,2 | 38 | 1900 | 0.310 | 600 | 62.5 | 56 | 97.0 | 26 | Red |
| 68N | 68.0 | 10,5,2 | 37 | 1700 | 0.340 | 600 | 80.5 | 54 | 168.0 | 21 | Orange |
| 72N | 72.0 | 10,5,2 | 34 | 1700 | 0.490 | 400 | 82.0 | 53 | 135.0 | 20 | Yellow |
| 82N | 82.0 | 10,5,2 | 34 | 1700 | 0.540 | 400 | 96.2 | 54 | 177.0 | 21 | Green |
| R10 | 100 | 10,5,2 | 34 | 1400 | 0.580 | 400 | 124 | 49 | - | - | Blue |
| R11 | 110 | 10,5,2 | 32 | 1350 | 0.610 | 300 | 138 | 43 | - | - | Violet |
| R12 | 120 | 10,5,2 | 32 | 1300 | 0.650 | 300 | 166 | 39 | - | - | Grey |
| R15 | 150 | 10,5,2 | 32 | 1300 | 0.950 | 280 | 230 | 25 | - | - | White |
| R18 | 180 | 10,5,2 | 25 | 1250 | 1.400 | 250 | 305 | 22 | - | - | Black |
| R22 | 220 | 10,5,2 | 25 | 1200 | 1.600 | 250 | - | - | - | - | Brown |
| R26 | 260 | 10,5,2 | 25 | 1000 | 2.000 | 200 | - | - | - | - | Orange |
| R27 | 270 | 10,5,2 | 25 | 900 | 2.100 | 200 | - | - | - | - | Red |
| R33 | 330 | 10,5,2 | 25 | 900 | 3.800 | 100 | - | - | - | - | Blue |
| R39 | 390 | 10,5,2 | 25 | 900 | 4.350 | 100 | - | - | - | - | Yellow |

Type 3650 Series

**Characteristics - Electrical
Type 36502A Series - 0805 Package**

| Inductance Code | Inductance (nH) @ 250MHz | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) | Colour Code |
|-----------------|--------------------------|---------------|--------------|-------------------|-------------------|------------------|-------------|
| 2N8 | 2.8 | 10,5 | 80 @ 1500MHz | 7900 | 0.06 | 800 | Grey |
| 3N0 | 3.0 | 10,5 | 65 @ 1500MHz | 7900 | 0.06 | 800 | White |
| 3N3 | 3.3 | 10,5 | 50 @ 1500MHz | 6000 | 0.08 | 600 | Black |
| 5N6 | 5.6 | 10,5 | 65 @ 1000MHz | 5500 | 0.08 | 600 | Orange |
| 6N8 | 6.8 | 10,5 | 50 @ 1000MHz | 5500 | 0.11 | 600 | Brown |
| 7N5 | 7.5 | 10,5 | 50 @ 1000MHz | 4500 | 0.14 | 600 | Green |
| 8N2 | 8.2 | 10,5 | 50 @ 1000MHz | 4700 | 0.12 | 600 | Red |
| 8N7 | 8.7 | 10,5 | 50 @ 1000MHz | 3900 | 0.21 | 400 | White |
| 10N | 10.0 | 10,5,2 | 60 @ 500MHz | 4200 | 0.10 | 600 | Blue |
| 12N | 12.0 | 10,5,2 | 50 @ 500MHz | 4000 | 0.15 | 600 | Orange |
| 15N | 15.0 | 10,5,2 | 50 @ 500MHz | 3400 | 0.17 | 600 | Yellow |
| 18N | 18.0 | 10,5,2 | 50 @ 500MHz | 3300 | 0.20 | 600 | Green |
| 22N | 22.0 | 10,5,2 | 55 @ 500MHz | 2600 | 0.22 | 500 | Blue |
| 24N | 24.0 | 10,5,2 | 50 @ 500MHz | 2000 | 0.22 | 500 | Grey |
| 27N | 27.0 | 10,5,2 | 55 @ 500MHz | 2500 | 0.25 | 500 | Violet |
| 33N | 33.0 | 10,5,2 | 60 @ 500MHz | 2050 | 0.27 | 500 | Grey |
| 36N | 36.0 | 10,5,2 | 55 @ 500MHz | 1700 | 0.27 | 500 | Orange |
| 39N | 39.0 | 10,5,2 | 60 @ 500MHz | 2000 | 0.29 | 500 | White |
| 43N | 43.0 | 10,5,2 | 60 @ 500MHz | 1650 | 0.34 | 500 | Yellow |
| 47N | 47.0 | 10,5,2 | 60 @ 500MHz | 1650 | 0.31 | 500 | Black |
| 56N | 56.0 | 10,5,2 | 60 @ 500MHz | 1550 | 0.34 | 500 | Brown |
| 68N | 68.0 | 10,5,2 | 60 @ 500MHz | 1450 | 0.38 | 500 | Red |
| 72N | 72.0 | 10,5,2 | 65 @ 500MHz | 1400 | 0.40 | 500 | Green |
| 82N | 82.0 | 10,5,2 | 65 @ 500MHz | 1300 | 0.42 | 400 | Orange |
| 91N | 91.0 | 10,5,2 | 65 @ 500MHz | 1200 | 0.48 | 400 | Black |
| R10 | 100 | 10,5,2 | 65 @ 500MHz | 1200 | 0.46 | 400 | Yellow |
| R11 | 110 | 10,5,2 | 50 @ 250MHz | 1000 | 0.48 | 400 | Brown |
| R12 | 120 | 10,5,2 | 50 @ 250MHz | 1100 | 0.51 | 400 | Green |
| R15 | 150 | 10,5,2 | 50 @ 250MHz | 920 | 0.56 | 400 | Blue |
| R18 | 180 | 10,5,2 | 50 @ 250MHz | 870 | 0.64 | 400 | Violet |
| R20 | 200 | 10,5,2 | 50 @ 250MHz | 860 | 0.66 | 400 | Orange |
| R22 | 220 | 10,5,2 | 50 @ 250MHz | 850 | 0.70 | 400 | Grey |
| R24 | 240 | 10,5,2 | 44 @ 250MHz | 690 | 1.00 | 350 | Red |
| R25 | 250 | 10,5,2 | 45 @ 250MHz | 680 | 1.00 | 350 | Green |
| R27 | 270 | 10,5,2 | 48 @ 250MHz | 650 | 1.00 | 350 | White |
| R30 | 300 | 10,5,2 | 48 @ 250MHz | 620 | 1.20 | 330 | Yellow |
| R33 | 330 | 10,5,2 | 48 @ 250MHz | 600 | 1.40 | 310 | Black |
| R36 | 360 | 10,5,2 | 48 @ 250MHz | 580 | 1.45 | 300 | Green |
| R39 | 390 | 10,5,2 | 48 @ 250MHz | 560 | 1.50 | 290 | Brown |
| R43 | 430 | 10,5,2 | 33 @ 100MHz | 430 | 1.70 | 230 | Blue |
| R47 | 470 | 10,5,2 | 33 @ 100MHz | 375 | 1.70 | 220 | Red |
| R56 | 560 | 10,5,2 | 23 @ 50MHz | 340 | 1.90 | 210 | Orange |
| R62 | 620 | 10,5,2 | 23 @ 50MHz | 220 | 2.20 | 210 | Yellow |
| R68 | 680 | 10,5,2 | 23 @ 50MHz | 200 | 2.20 | 190 | Green |
| R75 | 750 | 10,5,2 | 23 @ 50MHz | 200 | 2.30 | 180 | Blue |
| R82 | 820 | 10,5,2 | 23 @ 50MHz | 200 | 2.35 | 180 | Violet |
| 1R0 | 1000 | 10,5,2 | 20 @ 50MHz | 100 | 2.50 | 170 | Grey |
| 1R2 | 1200 | 10,5,2 | 18 @ 25MHz | 100 | 2.50 | 170 | White |
| 1R5 | 1500 | 10,5,2 | 16 @ 25MHz | 100 | 2.50 | 170 | Black |
| 1R8 | 1800 | 10,5,2 | 16 @ 7.9MHz | 80 | 2.50 | 170 | Brown |
| 2R2 | 2200 | 10,5,2 | 16 @ 7.9MHz | 60 | 2.70 | 160 | Red |
| 2R7 | 2700 | 10,5,2 | 16 @ 7.9MHz | 50 | 2.95 | 150 | Orange |

Type 3650 Series

**Characteristics - Electrical
Type 36502C Series - 1008 Package**

| Inductance Code | Inductance (nH) | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) |
|-----------------|-----------------|---------------|--------------|-------------------|-------------------|------------------|
| 5N6 | 5.6 @ 50MHz | 10,5 | 50 @ 1500MHz | 4000 | 0.15 | 1000 |
| 10N | 10 @ 50MHz | 10,5,2 | 50 @ 500MHz | 4100 | 0.08 | 1000 |
| 12N | 12 @ 50MHz | 10,5,2 | 50 @ 500MHz | 3300 | 0.09 | 1000 |
| 15N | 15 @ 50MHz | 10,5,2 | 50 @ 500MHz | 2500 | 0.11 | 1000 |
| 18N | 18 @ 50MHz | 10,5,2 | 50 @ 350MHz | 2400 | 0.12 | 1000 |
| 22N | 22 @ 50MHz | 10,5,2 | 55 @ 350MHz | 2400 | 0.12 | 1000 |
| 24N | 24 @ 50MHz | 10,5,2 | 55 @ 350MHz | 1900 | 0.12 | 1000 |
| 27N | 27 @ 50MHz | 10,5,2 | 55 @ 350MHz | 1600 | 0.13 | 1000 |
| 33N | 33 @ 50MHz | 10,5,2 | 60 @ 350MHz | 1600 | 0.14 | 1000 |
| 39N | 39 @ 50MHz | 10,5,2 | 60 @ 350MHz | 1500 | 0.15 | 1000 |
| 47N | 47 @ 50MHz | 10,5,2 | 65 @ 350MHz | 1500 | 0.16 | 1000 |
| 56N | 56 @ 50MHz | 10,5,2 | 65 @ 350MHz | 1300 | 0.18 | 1000 |
| 62N | 62 @ 50MHz | 10,5,2 | 65 @ 350MHz | 1250 | 0.20 | 1000 |
| 68N | 68 @ 50MHz | 10,5,2 | 65 @ 350MHz | 1300 | 0.20 | 1000 |
| 75N | 75 @ 50MHz | 10,5,2 | 60 @ 350MHz | 1100 | 0.21 | 1000 |
| 82N | 82 @ 50MHz | 10,5,2 | 60 @ 350MHz | 1000 | 0.22 | 1000 |
| R10 | 100 @ 25MHz | 10,5,2 | 60 @ 350MHz | 1000 | 0.56 | 650 |
| R12 | 120 @ 25MHz | 10,5,2 | 60 @ 350MHz | 950 | 0.63 | 650 |
| R15 | 150 @ 25MHz | 10,5,2 | 45 @ 100MHz | 850 | 0.70 | 580 |
| R18 | 180 @ 25MHz | 10,5,2 | 45 @ 100MHz | 750 | 0.77 | 620 |
| R22 | 220 @ 25MHz | 10,5,2 | 45 @ 100MHz | 700 | 0.84 | 500 |
| R24 | 240 @ 25MHz | 10,5,2 | 45 @ 100MHz | 650 | 0.88 | 500 |
| R27 | 270 @ 25MHz | 10,5,2 | 45 @ 100MHz | 600 | 0.91 | 500 |
| R30 | 300 @ 25MHz | 10,5,2 | 45 @ 100MHz | 585 | 1.00 | 450 |
| R33 | 330 @ 25MHz | 10,5,2 | 45 @ 100MHz | 570 | 1.05 | 450 |
| R36 | 360 @ 25MHz | 10,5,2 | 45 @ 100MHz | 530 | 1.10 | 470 |
| R39 | 390 @ 25MHz | 10,5,2 | 45 @ 100MHz | 500 | 1.12 | 470 |
| R43 | 430 @ 25MHz | 10,5,2 | 45 @ 100MHz | 480 | 1.15 | 470 |
| R47 | 470 @ 25MHz | 10,5,2 | 45 @ 100MHz | 450 | 1.19 | 470 |
| R56 | 560 @ 25MHz | 10,5,2 | 45 @ 100MHz | 415 | 1.33 | 400 |
| R62 | 620 @ 25MHz | 10,5,2 | 45 @ 100MHz | 375 | 1.40 | 300 |
| R68 | 680 @ 25MHz | 10,5,2 | 45 @ 100MHz | 375 | 1.47 | 400 |
| R75 | 750 @ 25MHz | 10,5,2 | 45 @ 100MHz | 360 | 1.54 | 360 |
| R82 | 820 @ 25MHz | 10,5,2 | 45 @ 100MHz | 350 | 1.61 | 400 |
| R91 | 910 @ 25MHz | 10,5,2 | 35 @ 50MHz | 320 | 1.68 | 380 |
| 1R0 | 1000 @ 25MHz | 10,5,2 | 35 @ 50MHz | 290 | 1.75 | 370 |
| 1R2 | 1200 @ 7.9MHz | 10,5,2 | 35 @ 50MHz | 250 | 2.00 | 310 |
| 1R5 | 1500 @ 7.9MHz | 10,5,2 | 28 @ 50MHz | 200 | 2.30 | 330 |
| 1R8 | 1800 @ 7.9MHz | 10,5,2 | 28 @ 50MHz | 160 | 2.60 | 300 |
| 2R2 | 2200 @ 7.9MHz | 10,5,2 | 28 @ 50MHz | 160 | 2.80 | 280 |
| 2R7 | 2700 @ 7.9MHz | 10,5,2 | 22 @ 25MHz | 140 | 3.20 | 290 |
| 3R3 | 3300 @ 7.9MHz | 10,5,2 | 22 @ 25MHz | 110 | 3.40 | 290 |
| 3R9 | 3900 @ 7.9MHz | 10,5,2 | 20 @ 25MHz | 100 | 3.60 | 260 |
| 4R7 | 4700 @ 7.9MHz | 10,5,2 | 20 @ 25MHz | 90 | 4.00 | 260 |
| 5R6 | 5600 @ 7.9MHz | 10,5,2 | 16 @ 7.96MHz | 20 | 4.00 | 240 |
| 6R8 | 6800 @ 7.9MHz | 10,5,2 | 15 @ 7.96MHz | 40 | 4.90 | 200 |
| 8R2 | 8200 @ 7.9MHz | 10,5,2 | 15 @ 7.96MHz | 25 | 6.00 | 170 |
| 103 | 10000 @ 2.52MHz | 10,5,2 | 15 @ 7.96MHz | 20 | 9.00 | 150 |
| 123 | 12000 @ 2.52MHz | 10,5,2 | 15 @ 7.96MHz | 18 | 10.5 | 130 |
| 153 | 15000 @ 2.52MHz | 10,5,2 | 15 @ 7.96MHz | 15 | 11.5 | 120 |

Type 3650 Series

**Characteristics - Electrical
Type 36512A Series - 0805 Package - Low Profile**

| Inductance Code | Inductance (nH) | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) | Colour Code |
|-----------------|-----------------|---------------|--------------|-------------------|-------------------|------------------|-------------|
| 1N8 | 1.8 @ 250MHz | 10 | 55 @ 1500MHz | 9400 | 0.03 | 800 | Black |
| 3N9 | 3.9 @ 250MHz | 10,5 | 50 @ 1000MHz | 6100 | 0.06 | 800 | Brown |
| 4N7 | 4.7 @ 250MHz | 10,5 | 50 @ 1000MHz | 5500 | 0.06 | 800 | Red |
| 6N8 | 6.8 @ 250MHz | 10,5 | 50 @ 1000MHz | 5500 | 0.08 | 800 | Orange |
| 8N2 | 8.2 @ 250MHz | 10,5 | 50 @ 1000MHz | 4800 | 0.08 | 800 | Yellow |
| 10N | 10.0 @ 250MHz | 10,5,2 | 55 @ 750MHz | 3300 | 0.08 | 800 | Green |
| 12N | 12.0 @ 250MHz | 10,5,2 | 55 @ 750MHz | 3800 | 0.10 | 800 | Blue |
| 15N | 15.0 @ 250MHz | 10,5,2 | 50 @ 500MHz | 2950 | 0.10 | 800 | Violet |
| 18N | 18.0 @ 250MHz | 10,5,2 | 50 @ 500MHz | 3100 | 0.13 | 800 | Grey |
| 22N | 22.0 @ 250MHz | 10,5,2 | 50 @ 500MHz | 2900 | 0.15 | 800 | White |
| 27N | 27.0 @ 250MHz | 10,5,2 | 50 @ 500MHz | 2450 | 0.23 | 600 | Black |
| 33N | 33.0 @ 250MHz | 10,5,2 | 50 @ 500MHz | 2350 | 0.28 | 600 | Brown |
| 39N | 39.0 @ 250MHz | 10,5,2 | 50 @ 500MHz | 2200 | 0.33 | 600 | Red |
| 47N | 47.0 @ 200MHz | 10,5,2 | 50 @ 500MHz | 2000 | 0.39 | 600 | Orange |
| 56N | 56.0 @ 200MHz | 10,5,2 | 50 @ 500MHz | 1850 | 0.39 | 500 | Yellow |
| 68N | 68.0 @ 200MHz | 10,5,2 | 50 @ 500MHz | 1500 | 0.40 | 500 | Green |
| 82N | 82.0 @ 150MHz | 10,5,2 | 50 @ 500MHz | 1500 | 0.44 | 500 | Blue |
| R10 | 100.0 @ 150MHz | 10,5,2 | 50 @ 500MHz | 1200 | 0.64 | 400 | Violet |
| R12 | 120.0 @ 150MHz | 10,5,2 | 40 @ 250MHz | 1150 | 0.68 | 300 | Grey |
| R15 | 150.0 @ 150MHz | 10,5,2 | 40 @ 250MHz | 1050 | 0.80 | 300 | White |
| 1R0 | 1000.0 @ 25MHz | 10,5,2 | 16 @ 50MHz | 80 | 2.00 | 220 | Black |

**Characteristics - Electrical
Type 36512C Series - 1008 Package - Low Profile**

| Inductance Code | Inductance (nH) | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) |
|-----------------|-----------------|---------------|--------------|-------------------|-------------------|------------------|
| 3N3 | 3.3 @ 50MHz | 10,5 | 42 @ 1500MHz | 6000 | 0.03 | 1000 |
| 3N9 | 3.9 @ 50MHz | 10,5 | 42 @ 1500MHz | 6000 | 0.08 | 1000 |
| 4N7 | 4.7 @ 50MHz | 10,5 | 42 @ 1500MHz | 6000 | 0.15 | 600 |
| 5N6 | 5.6 @ 50MHz | 10,5 | 50 @ 1500MHz | 5800 | 0.16 | 600 |
| 6N8 | 6.8 @ 50MHz | 10,5 | 50 @ 1500MHz | 5400 | 0.17 | 600 |
| 8N2 | 8.2 @ 50MHz | 10,5 | 50 @ 1500MHz | 5000 | 0.22 | 600 |
| 15N | 15 @ 50MHz | 10,5 | 57 @ 500MHz | 3000 | 0.22 | 600 |
| 20N | 20 @ 50MHz | 10,5 | 72 @ 500MHz | 2400 | 0.33 | 600 |
| 30N | 30 @ 50MHz | 10,5 | 69 @ 500MHz | 2400 | 0.38 | 600 |
| 40N | 40 @ 50MHz | 10,5 | 67 @ 500MHz | 2000 | 0.43 | 600 |
| 50N | 50 @ 50MHz | 10,5,2 | 72 @ 500MHz | 1900 | 0.48 | 600 |
| 56N | 56 @ 50MHz | 10,5,2 | 67 @ 500MHz | 1850 | 0.49 | 600 |
| 60N | 60 @ 50MHz | 10,5,2 | 75 @ 500MHz | 1800 | 0.52 | 600 |
| 68N | 68 @ 50MHz | 10,5,2 | 72 @ 500MHz | 1750 | 0.53 | 560 |
| 70N | 70 @ 50MHz | 10,5,2 | 68 @ 500MHz | 1700 | 0.55 | 510 |
| 80N | 80 @ 50MHz | 10,5,2 | 75 @ 500MHz | 1400 | 0.56 | 510 |
| 90N | 90 @ 50MHz | 10,5,2 | 80 @ 500MHz | 1400 | 0.61 | 500 |
| R56 | 560 @ 25MHz | 10,5,2 | 40 @ 100MHz | 400 | 1.33 | 400 |

Type 3650 Series

Characteristics - Electrical
Type 36521J Series - 0603 Package - High Current

| Inductance Code | Inductance (nH) | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) | Colour Code |
|-----------------|-----------------|---------------|--------|-------------------|-------------------|------------------|-------------|
| 1N6 | 1.6 @ 250MHz | 10,5 | 24 | 12500 | 0.030 | 2400 | Black |
| 3N6 | 3.6 @ 250MHz | 10,5 | 24 | 5900 | 0.048 | 2300 | Brown |
| 3N9 | 3.9 @ 250MHz | 10,5 | 25 | 5900 | 0.054 | 2200 | Red |
| 6N8 | 6.8 @ 250MHz | 10,5 | 35 | 5800 | 0.054 | 2100 | Orange |
| 7N5 | 7.5 @ 250MHz | 10,5 | 35 | 3700 | 0.059 | 2100 | Yellow |
| 10N | 10 @ 250MHz | 10,5,2 | 38 | 3700 | 0.071 | 2000 | Green |
| 12N | 12 @ 250MHz | 10,5,2 | 38 | 3000 | 0.075 | 2000 | Blue |
| 15N | 15 @ 250MHz | 10,5,2 | 38 | 2800 | 0.080 | 1900 | Violet |
| 18N | 18 @ 250MHz | 10,5,2 | 40 | 2800 | 0.099 | 1900 | Grey |
| 22N | 22 @ 250MHz | 10,5,2 | 42 | 2400 | 0.099 | 1800 | White |
| 24N | 24 @ 250MHz | 10,5,2 | 42 | 2400 | 0.105 | 1800 | Black |

Characteristics - Electrical
Type 36532A Series - 0805 Package - High Q

| Inductance Code | Inductance (nH) | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) | Colour Code |
|-----------------|-----------------|---------------|--------------|-------------------|-------------------|------------------|-------------|
| 2N5 | 2.5 @ 250MHz | 10,5 | 80 @ 1500MHz | 6000 | 0.020 | 1600 | Black |
| 5N6 | 5.6 @ 250MHz | 10,5 | 98 @ 1500MHz | 6000 | 0.035 | 1600 | Brown |
| 6N2 | 6.2 @ 250MHz | 10,5 | 88 @ 1000MHz | 4750 | 0.035 | 1600 | Red |
| 6N8 | 6.8 @ 250MHz | 10,5 | 80 @ 1000MHz | 4400 | 0.035 | 1600 | White |
| 8N2 | 8.2 @ 250MHz | 10,5 | 75 @ 1000MHz | 3000 | 0.075 | 1000 | Grey |
| 12N | 12 @ 250MHz | 10,5 | 80 @ 1000MHz | 3000 | 0.045 | 1600 | Orange |
| 16N | 16 @ 250MHz | 10,5,2 | 72 @ 500MHz | 2950 | 0.060 | 1500 | Yellow |
| 18N | 18 @ 250MHz | 10,5,2 | 75 @ 500MHz | 2550 | 0.060 | 1400 | Green |
| 20N | 20 @ 250MHz | 10,5,2 | 70 @ 500MHz | 2050 | 0.055 | 1400 | Blue |
| 27N | 27 @ 250MHz | 10,5,2 | 75 @ 500MHz | 2000 | 0.070 | 1300 | Violet |
| 30N | 30 @ 250MHz | 10,5,2 | 65 @ 500MHz | 1950 | 0.095 | 1200 | Grey |
| 39N | 39 @ 250MHz | 10,5,2 | 65 @ 500MHz | 1600 | 0.110 | 1100 | White |
| 48N | 48 @ 200MHz | 10,5,2 | 65 @ 500MHz | 1400 | 0.095 | 1200 | Black |
| 51N | 51 @ 200MHz | 10,5,2 | 65 @ 500MHz | 1400 | 0.120 | 1000 | Brown |

Characteristics - Electrical
Type 36532C Series - 1008 Package - High Q

| Inductance Code | Inductance (nH) | Tolerance (%) | Q Min. | S.R.F. Min. (MHz) | R.D.C. Max (Ohms) | I.D.C. Max. (mA) |
|-----------------|-----------------|---------------|--------------|-------------------|-------------------|------------------|
| 3N0 | 3.0 @ 50MHz | 10,5 | 70 @ 1500MHz | 6000 | 0.04 | 1600 |
| 4N1 | 4.1 @ 50MHz | 10,5 | 75 @ 1500MHz | 6000 | 0.05 | 1600 |
| 7N8 | 7.8 @ 50MHz | 10,5 | 75 @ 500MHz | 3800 | 0.05 | 1600 |
| 10N | 10 @ 50MHz | 10,5,2 | 60 @ 500MHz | 3600 | 0.06 | 1600 |
| 12N | 12 @ 50MHz | 10,5,2 | 70 @ 500MHz | 2800 | 0.06 | 1500 |
| 18N | 18 @ 50MHz | 10,5,2 | 62 @ 350MHz | 2700 | 0.07 | 1400 |
| 22N | 22 @ 50MHz | 10,5,2 | 62 @ 350MHz | 2050 | 0.07 | 1400 |
| 33N | 33 @ 50MHz | 10,5,2 | 75 @ 350MHz | 1700 | 0.09 | 1300 |
| 39N | 39 @ 50MHz | 10,5,2 | 75 @ 350MHz | 1300 | 0.09 | 1300 |
| 47N | 47 @ 50MHz | 10,5,2 | 75 @ 350MHz | 1450 | 0.12 | 1200 |
| 56N | 56 @ 50MHz | 10,5,2 | 75 @ 350MHz | 1230 | 0.12 | 1200 |
| 68N | 68 @ 50MHz | 10,5,2 | 80 @ 350MHz | 1150 | 0.13 | 1100 |
| 82N | 82 @ 50MHz | 10,5,2 | 80 @ 350MHz | 1060 | 0.16 | 1100 |
| R10 | 100 @ 50MHz | 10,5,2 | 62 @ 350MHz | 820 | 0.16 | 1000 |

Type 3650 Series

**Environmental Characteristics -
Mechanical Performance**

| Item | Specification | Test Method |
|--|---|---|
| Vibration Test: | Appearance: No damage $\Delta L \leq \pm 5\%$ $\Delta Q \leq \pm 10\%$ | Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1min Amplitude: 1.5mm Time: 2hrs for each axis (X, Y & Z), total 6hrs |
| Resistance to Soldering Heat: | | Solder Temperature: 260±5°C Immersion Time: 10±2sec |
| Component Adhesion: (Push Test) | 1 lbs. For 0402 2 lbs. For 0603 3 lbs. For the rest | The device should be REFLOW soldered (230±5°C for 10 seconds) to a tinned copper substrate. A dynamiter force gauge should be applied to the side of the component. The device must with stand a minimum force of 2 or 4 pounds without a failure of the termination attached to component. |
| Drop Test: | After test, there shall be no evidence of electrical or mechanical damage | Drop once for each face and once for each corner. Total drop 10 Times. Drop height :100cm Drop weight:125g |
| Solderability Test: | The terminal should at least be 90% covered with solder. | After fluxing (alpha 100 or equiv), inductor shall be dipped in a melted solder bath at 260±5°C for 5 seconds. |
| Resistance to Solvent Test: | There shall be no case of deformation change in appearance or obliteration of marking | MIL-STD202F,METHOD 215D |

Electrical Performance

| Item | Specification | Test Method |
|---|---|---|
| Inductance: | | HP4291B |
| Q: | | HP4291B |
| SRF: | REFER to Standard Electrical Characteristic List | HP8753D |
| DC Resistance R_{dc}: | | Micro-Ohmeter (Gom-801G) |
| Rated Current IDC: | | Applied the current to coils, $\Delta L < 10\%$ |
| Overload Test: | After test, there shall be no evidence of electrical and mechanical damage | Applied 2 times rated current for 5 minutes |
| Withstanding Voltage Test: | After test, there shall be no evidence of electrical and mechanical damage. | Ac voltage of 500 VAC applied between inductors terminal and case for 1 minute. |
| Insulation Resistance Test: | 1000M OHM MIN. | 100 VDC applied between inductor terminal and case |

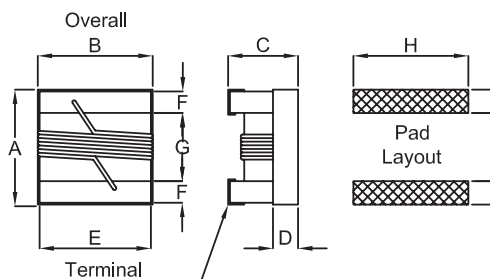
Type 3650 Series

Climatic Test

| Item | Specification | Test Method |
|----------------------------|---|---|
| Operating Temp. Range: | | -40°C to +125°C |
| Humidity Resistance: | | Temperature: 40±2°C Relative Humidity: 90-95% Time: 96hrs±2hrs Measured after exposure in the room condition for 2hrs |
| Low Temp. Storage Test: | | Temperature: -40±2°C Time: 48±2hrs Inductors are to be tested after 1 hour at room temperature |
| Thermal Shock Test: | Appearance: No damage $\Delta L \leq \pm 10\%$ $\Delta Q \leq \pm 20\%$ | One Cycle: Step Temperature(°C) Time (min) 1 -25±3 30 2 25±2 15 3 85±3 30 4 25±2 15 Total: 5 Cycles |
| High Temp. Storage Test: | | Temperature: 125±2°C Time: 48±2hrs Measured after 1 hour at room temperature |
| High Temp. Load Life Test: | | Temperature: 85±2°C Time: 1000±12hrs Load: Rated current |
| Humidity Load Life: | There should be no evidence of short or open circuit. | Temperature: 40±2°C Relative Humidity: 90-95% Time: 1000±12hrs Load: Rated current |

* Storage Temperature: 25±3°C, <80%RH

Dimensions



Terminal wraparound:
Approx 0.007"(0.18mm)
Both Ends

Type 3650 Series

| Series | A Max. | B Max. | C Max. | D Ref. | E | F | G | H | I | J |
|--------|--------|--------|--------|--------|------|------|------|------|------|------|
| 36502C | 2.92 | 2.79 | 2.10 | 0.51 | 2.03 | 0.51 | 1.52 | 2.54 | 1.02 | 1.27 |
| 36502A | 2.29 | 1.73 | 1.52 | 0.51 | 1.27 | 0.51 | 1.02 | 1.78 | 1.02 | 0.76 |
| 36501J | 1.80 | 1.12 | 1.02 | 0.38 | 0.76 | 0.33 | 0.86 | 1.02 | 0.64 | 0.64 |
| 36501E | 1.27 | 0.76 | 0.61 | 0.15 | 0.51 | 0.23 | 0.56 | 0.66 | 0.50 | 0.46 |

Type 3651 Series

| Series | A Max. | B Max. | C Max. | D Ref. | E | F | G | H | I | J |
|--------|--------|--------|--------|--------|------|------|------|------|------|------|
| 36512C | 2.92 | 2.79 | 1.40 | 0.65 | 2.03 | 0.51 | 1.52 | 2.54 | 1.02 | 1.27 |
| 36512A | 2.29 | 1.73 | 1.03 | 0.51 | 1.27 | 0.44 | 1.02 | 1.78 | 1.02 | 0.76 |

Type 3652 / 3653 Series

| Series | A Max. | B Max. | C Max. | D Ref. | E | F | G | H | I | J |
|--------|--------|--------|--------|--------|------|------|------|------|------|------|
| 36532C | 2.92 | 2.79 | 2.03 | 0.65 | 2.03 | 0.51 | 1.52 | 2.54 | 1.02 | 1.27 |
| 36532A | 2.29 | 1.73 | 1.52 | 0.51 | 1.27 | 0.44 | 1.02 | 1.78 | 1.02 | 0.76 |
| 36521J | 1.80 | 1.12 | 1.02 | 0.38 | 0.76 | 0.33 | 0.86 | 1.02 | 0.64 | 0.64 |

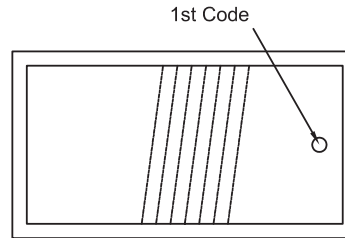
Type 3650 Series

Colour Coding

0603 / 0805/1008 Series (0402 Series has no Colour Coding)

Because of their small size, these parts are marked with a single colour dot.

The inductance value represented by the dot is shown on the data page for each series.



How to Order

| 3650 | 1E | R10 | J | TDG |
|--|--|--|--|--|
| Common Part | Case Size | Inductance Value | Tolerance | Packaging |
| 3650 - Std 3651 - Low Profile 3652 - High Current 3653 - High Q | 1E – 0402 Package 1J – 0603 Package 2A – 0805 Package 2C - 1008 Package | See relevant table for Inductance Code | G - $\pm 2\%$ J - $\pm 5\%$ K - $\pm 10\%$ M - $\pm 20\%$ | TDG - 2000 pcs/reel TE - 4000pcs/reel (1E, 1J only) |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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