

Description

- Surface mount magnetics that can be used as single or coupled inductors or 1:1 transformers that provide isolation between two windings
- OCTA-PAC's are designed around high frequency, low loss core material
- ECONO-PAC's are a lower cost version of OCTA-PAC's offering high saturation flux density, Powder Iron core material
- OCTA-PAC PLUS's offer higher current ratings and higher saturation flux densities than OCTA-PAC and ECONO-PAC, Amorphous metal core material
- Secure 4 Terminal Mounting
- Inductor more versatile inductance combination by series or parallel connections



Applications

- Computer and portable power devices
- LCD panels, DVD players
- Inductor: DC-DC converters
- Buck, boost, forward, and resonant converters
- Noise filtering and filter chokes
- Transformers: 1:1 300Vdc isolation, flyback, sepic

Environmental Data

- Storage temperature range: -40°C to +125°C
- Operating ambient temperature range: -40°C to +85°C (range is application specific).
- Solder reflow temperature: +260°C max. for 10 seconds max.

Packaging

- Supplied in tape and reel packaging, 1100 (EP01, OPA1, and OP01), 800 (EP02, OP02, OPA2, EP03, OPA3, and OP03), and 600 (EP04, OPA4, and OP04) per reel

Legend

Marking

- CTX___-__ (First three digits CTX; Second 2-3 digits = Inductance Value; Last 1-2 digits, product size & type)

Product Size/Type

- CTX___-1 (-1 = size; no suffix = OCTA-PAC®)
- CTX___-1P (-1 = size; P suffix = ECONO-PAC™)
- CTX___-1A (-1 = size; A suffix = OCTA-PAC® PLUS)

| Part Number | PARALLEL | | | | SERIES | | | |
|--------------|--|---|-----------------------|-------------------------|--|---|-----------------------|-------------------------|
| | Open Circuit Inductance μH +/-20% | Full Load Inductance μH min. | Full Load Current Adc | DC Resistance ohms max. | Open Circuit Inductance μH +/-20% | Full Load Inductance μH min. | Full Load Current Adc | DC Resistance ohms max. |
| CTX0.47-1P-R | .42 | .31 | 5.50 | .005 | 1.67 | 1.25 | 2.75 | .021 |
| CTX0.68-1P-R | .60 | .43 | 5.10 | .006 | 2.40 | 1.74 | 2.55 | .025 |
| CTX1-1P-R | 1.07 | .73 | 4.50 | .008 | 4.28 | 2.92 | 2.25 | .032 |
| CTX2-1P-R | 2.02 | 1.36 | 3.40 | .013 | 8.08 | 5.44 | 1.70 | .054 |
| CTX5-1P-R | 4.83 | 3.37 | 2.00 | .040 | 19.31 | 13.47 | 1.00 | .161 |
| CTX8-1P-R | 8.08 | 5.31 | 1.80 | .052 | 32.33 | 21.23 | .90 | .207 |
| CTX10-1P-R | 9.62 | 6.23 | 1.70 | .057 | 38.48 | 24.94 | .85 | .227 |
| CTX15-1P-R | 15.03 | 9.62 | 1.40 | .087 | 60.12 | 38.47 | .70 | .348 |
| CTX20-1P-R | 20.46 | 14.12 | 1.00 | .158 | 81.83 | 56.47 | .50 | .634 |
| CTX25-1P-R | 25.40 | 17.07 | .96 | .177 | 101.60 | 68.29 | .48 | .708 |
| CTX33-1P-R | 32.33 | 22.27 | .80 | .250 | 129.32 | 89.06 | .40 | 1.001 |
| CTX50-1P-R | 50.52 | 33.57 | .70 | .316 | 202.07 | 134.27 | .35 | 1.263 |
| CTX68-1P-R | 68.40 | 43.65 | .66 | .373 | 273.61 | 174.61 | .33 | 1.490 |
| CTX100-1P-R | 99.01 | 63.64 | .54 | .557 | 396.06 | 254.55 | .27 | 2.227 |
| CTX150-1P-R | 150.72 | 96.64 | .44 | .844 | 602.87 | 386.56 | .22 | 3.376 |
| CTX200-1P-R | 198.41 | 130.79 | .36 | 1.208 | 793.65 | 523.16 | .18 | 4.831 |
| CTX300-1P-R | 299.87 | 190.05 | .32 | 1.525 | 1199.46 | 760.19 | .16 | 6.100 |
| CTX0.47-2P-R | .54 | .42 | 5.90 | .006 | 2.18 | 1.69 | 2.95 | .024 |
| CTX0.68-2P-R | .85 | .64 | 5.40 | .007 | 3.40 | 2.55 | 2.70 | .029 |
| CTX1-2P-R | 1.22 | .89 | 5.00 | .008 | 4.90 | 3.57 | 2.50 | .033 |
| CTX2-2P-R | 2.18 | 1.56 | 3.90 | .014 | 8.70 | 6.26 | 1.95 | .055 |
| CTX5-2P-R | 4.90 | 3.57 | 2.50 | .032 | 19.58 | 14.26 | 1.25 | .128 |
| CTX8-2P-R | 7.65 | 5.31 | 2.30 | .040 | 30.60 | 21.23 | 1.15 | .158 |
| CTX10-2P-R | 9.83 | 6.73 | 2.10 | .045 | 39.30 | 26.92 | 1.05 | .179 |
| CTX15-2P-R | 14.99 | 10.51 | 1.60 | .085 | 59.98 | 42.02 | .80 | .339 |
| CTX20-2P-R | 19.58 | 13.37 | 1.50 | .097 | 78.34 | 53.48 | .75 | .387 |
| CTX25-2P-R | 24.79 | 16.60 | 1.40 | .109 | 99.14 | 66.38 | .70 | .436 |
| CTX33-2P-R | 32.67 | 21.29 | 1.30 | .126 | 130.70 | 85.17 | .65 | .503 |
| CTX50-2P-R | 49.10 | 35.31 | .82 | .305 | 196.38 | 141.24 | .41 | 1.221 |
| CTX68-2P-R | 68.85 | 47.93 | .76 | .362 | 275.40 | 191.71 | .38 | 1.445 |
| CTX100-2P-R | 99.14 | 69.56 | .62 | .541 | 396.58 | 278.22 | .31 | 2.162 |
| CTX150-2P-R | 148.10 | 100.07 | .56 | .665 | 592.42 | 400.27 | .28 | 2.660 |
| CTX200-2P-R | 201.59 | 138.49 | .46 | .951 | 806.34 | 553.97 | .23 | 3.804 |
| CTX300-2P-R | 300.42 | 197.52 | .42 | 1.176 | 1201.70 | 790.08 | .21 | 4.703 |

| Part Number | PARALLEL | | | | SERIES | | | |
|--------------|--|---|-----------------------|-------------------------|--|---|-----------------------|-------------------------|
| | Open Circuit Inductance μH $\pm 20\%$ | Full Load Inductance μH min. | Full Load Current Adc | DC Resistance ohms max. | Open Circuit Inductance μH $\pm 20\%$ | Full Load Inductance μH min. | Full Load Current Adc | DC Resistance ohms max. |
| CTX0.47-3P-R | .46 | .35 | 6.20 | .006 | 1.85 | 1.42 | 3.10 | .025 |
| CTX0.68-3P-R | .67 | .50 | 5.70 | .007 | 2.66 | 1.98 | 2.85 | .028 |
| CTX1-3P-R | .91 | .65 | 5.40 | .008 | 3.63 | 2.62 | 2.70 | .032 |
| CTX2-3P-R | 1.85 | 1.24 | 4.60 | .011 | 7.40 | 4.97 | 2.30 | .045 |
| CTX5-3P-R | 4.74 | 3.04 | 3.20 | .022 | 18.94 | 12.15 | 1.60 | .090 |
| CTX8-3P-R | 8.16 | 4.90 | 2.80 | .030 | 32.63 | 19.60 | 1.40 | .119 |
| CTX10-3P-R | 9.79 | 5.71 | 2.70 | .033 | 39.15 | 22.85 | 1.35 | .131 |
| CTX15-3P-R | 14.50 | 8.50 | 2.20 | .050 | 58.02 | 34.01 | 1.10 | .198 |
| CTX20-3P-R | 20.15 | 13.12 | 1.50 | .111 | 80.59 | 52.48 | .75 | .443 |
| CTX25-3P-R | 25.33 | 16.16 | 1.40 | .125 | 101.31 | 64.66 | .70 | .499 |
| CTX33-3P-R | 32.63 | 20.32 | 1.30 | .146 | 130.54 | 81.30 | .65 | .571 |
| CTX50-3P-R | 50.02 | 33.06 | .92 | .277 | 200.10 | 132.24 | .46 | 1.108 |
| CTX68-3P-R | 68.84 | 44.15 | .84 | .328 | 275.35 | 176.61 | .42 | 1.312 |
| CTX100-3P-R | 101.31 | 65.50 | .68 | .501 | 405.22 | 262.02 | .34 | 2.005 |
| CTX150-3P-R | 149.85 | 90.92 | .64 | .621 | 599.40 | 363.68 | .32 | 2.483 |
| CTX200-3P-R | 200.10 | 116.51 | .60 | .731 | 800.38 | 466.03 | .30 | 2.925 |
| CTX300-3P-R | 298.39 | 172.12 | .50 | .926 | 1193.55 | 688.50 | .25 | 3.702 |
| CTX0.47-4P-R | .49 | .37 | 7.90 | .005 | 1.95 | 1.49 | 3.95 | .019 |
| CTX0.68-4P-R | .76 | .56 | 7.20 | .006 | 3.05 | 2.24 | 3.60 | .023 |
| CTX1-4P-R | 1.10 | .81 | 5.90 | .008 | 4.39 | 3.24 | 2.95 | .033 |
| CTX2-4P-R | 1.95 | 1.42 | 4.60 | .014 | 7.81 | 5.69 | 2.30 | .055 |
| CTX5-4P-R | 5.15 | 3.56 | 3.30 | .027 | 20.62 | 14.23 | 1.65 | .107 |
| CTX8-4P-R | 7.81 | 5.15 | 3.00 | .033 | 31.23 | 20.61 | 1.50 | .131 |
| CTX10-4P-R | 9.88 | 6.70 | 2.50 | .047 | 39.53 | 26.79 | 1.25 | .187 |
| CTX15-4P-R | 14.76 | 9.52 | 2.30 | .057 | 59.05 | 38.09 | 1.15 | .228 |
| CTX20-4P-R | 20.62 | 13.44 | 1.90 | .084 | 82.47 | 53.76 | .95 | .337 |
| CTX25-4P-R | 25.65 | 17.17 | 1.60 | .115 | 102.60 | 68.68 | .80 | .461 |
| CTX33-4P-R | 33.21 | 22.93 | 1.30 | .166 | 132.86 | 91.72 | .65 | .662 |
| CTX50-4P-R | 48.80 | 32.21 | 1.20 | .201 | 195.20 | 128.83 | .60 | .805 |
| CTX68-4P-R | 67.37 | 43.04 | 1.10 | .238 | 269.50 | 172.16 | .55 | .952 |
| CTX100-4P-R | 99.09 | 69.54 | .72 | .565 | 396.38 | 278.15 | .36 | 2.259 |
| CTX150-4P-R | 149.45 | 101.46 | .64 | .696 | 597.80 | 405.83 | .32 | 2.784 |
| CTX200-4P-R | 200.11 | 131.37 | .60 | .810 | 800.44 | 525.47 | .30 | 3.240 |
| CTX300-4P-R | 298.93 | 188.03 | .54 | 1.003 | 1195.72 | 752.13 | .27 | 4.011 |
| CTX0.47-1-R | .40 | .26 | 5.50 | .005 | 1.60 | 1.05 | 2.75 | .020 |
| CTX0.68-1-R | .63 | .41 | 4.50 | .006 | 2.50 | 1.63 | 2.25 | .024 |
| CTX1-1-R | .90 | .56 | 4.20 | .007 | 3.60 | 2.24 | 2.10 | .028 |
| CTX2-1-R | 2.03 | 1.00 | 4.10 | .010 | 8.10 | 4.01 | 2.05 | .040 |
| CTX5-1-R | 4.90 | 2.66 | 2.30 | .030 | 19.60 | 10.64 | 1.15 | .122 |
| CTX8-1-R | 8.10 | 4.08 | 2.00 | .039 | 32.40 | 16.34 | 1.00 | .157 |
| CTX10-1-R | 10.00 | 4.85 | 1.90 | .044 | 40.00 | 19.40 | .95 | .176 |
| CTX15-1-R | 14.40 | 8.74 | 1.10 | .080 | 57.60 | 34.96 | .55 | .319 |
| CTX20-1-R | 19.60 | 11.54 | 1.00 | .146 | 78.40 | 46.15 | .50 | .583 |
| CTX25-1-R | 25.60 | 16.35 | .74 | .167 | 102.40 | 65.42 | .37 | .668 |
| CTX33-1-R | 32.40 | 19.84 | .72 | .293 | 129.60 | 79.37 | .36 | 1.171 |
| CTX50-1-R | 50.63 | 29.34 | .64 | .365 | 202.50 | 117.38 | .32 | 1.461 |
| CTX68-1-R | 67.60 | 39.73 | .54 | .516 | 270.40 | 158.92 | .27 | 2.064 |
| CTX100-1-R | 99.23 | 58.72 | .44 | .784 | 396.90 | 234.88 | .22 | 3.137 |
| CTX150-1-R | 148.23 | 85.16 | .38 | .965 | 592.90 | 340.64 | .19 | 3.861 |
| CTX200-1-R | 202.50 | 107.60 | .37 | 1.142 | 810.00 | 430.39 | .19 | 4.567 |
| CTX300-1-R | 302.50 | 191.38 | .22 | 1.431 | 1210.00 | 765.54 | .11 | 5.724 |
| CTX0.47-2-R | .42 | .29 | 6.50 | .005 | 1.69 | 1.17 | 3.25 | .019 |
| CTX0.68-2-R | .75 | .50 | 5.50 | .006 | 3.01 | 1.98 | 2.75 | .024 |
| CTX1-2-R | 1.18 | .76 | 4.60 | .007 | 4.70 | 3.04 | 2.30 | .028 |
| CTX2-2-R | 2.30 | 1.27 | 4.50 | .010 | 9.21 | 5.07 | 2.25 | .038 |
| CTX5-2-R | 4.70 | 2.66 | 3.00 | .021 | 18.80 | 10.65 | 1.50 | .084 |
| CTX8-2-R | 7.94 | 4.18 | 2.60 | .027 | 31.77 | 16.72 | 1.30 | .108 |
| CTX10-2-R | 10.58 | 5.18 | 2.50 | .031 | 42.30 | 20.72 | 1.25 | .125 |
| CTX15-2-R | 15.23 | 8.53 | 1.70 | .059 | 60.91 | 34.10 | .85 | .236 |
| CTX20-2-R | 20.73 | 12.36 | 1.30 | .107 | 82.91 | 49.46 | .65 | .426 |
| CTX25-2-R | 24.86 | 16.09 | 1.00 | .117 | 99.45 | 64.35 | .50 | .466 |
| CTX33-2-R | 31.77 | 15.90 | 1.40 | .105 | 127.09 | 63.59 | .70 | .420 |
| CTX50-2-R | 51.18 | 28.79 | .92 | .210 | 204.73 | 115.16 | .46 | .839 |
| CTX68-2-R | 67.87 | 38.71 | .78 | .303 | 271.47 | 154.83 | .39 | 1.214 |
| CTX100-2-R | 99.45 | 57.45 | .63 | .457 | 397.81 | 229.79 | .32 | 1.828 |

| Part Number | PARALLEL | | | | SERIES | | | |
|-------------|--|---|-----------------------|-------------------------|--|---|-----------------------|-------------------------|
| | Open Circuit Inductance μH +/-20% | Full Load Inductance μH min. | Full Load Current Adc | DC Resistance ohms max. | Open Circuit Inductance μH +/-20% | Full Load Inductance μH min. | Full Load Current Adc | DC Resistance ohms max. |
| CTX150-2-R | 147.39 | 93.46 | .43 | .560 | 589.57 | 373.84 | .22 | 2.241 |
| CTX200-2-R | 198.58 | 122.94 | .39 | .796 | 794.30 | 491.76 | .20 | 3.184 |
| CTX300-2-R | 300.80 | 169.06 | .38 | 1.231 | 1203.20 | 676.24 | .19 | 4.929 |
| CTX0.47-3-R | .38 | .27 | 6.00 | .005 | 1.54 | 1.08 | 3.00 | .020 |
| CTX0.68-3-R | .60 | .42 | 5.00 | .006 | 2.40 | 1.67 | 2.50 | .024 |
| CTX1-3-R | .86 | .57 | 4.80 | .007 | 3.46 | 2.28 | 2.40 | .028 |
| CTX2-3-R | 1.94 | 1.05 | 4.70 | .010 | 7.78 | 4.22 | 2.35 | .040 |
| CTX5-3-R | 4.70 | 2.56 | 3.00 | .019 | 18.82 | 10.26 | 1.50 | .077 |
| CTX8-3-R | 7.78 | 3.74 | 2.80 | .025 | 31.10 | 14.98 | 1.40 | .099 |
| CTX10-3-R | 9.60 | 4.38 | 2.70 | .028 | 38.40 | 17.54 | 1.35 | .111 |
| CTX15-3-R | 15.00 | 7.26 | 2.00 | .043 | 60.00 | 29.06 | 1.00 | .172 |
| CTX20-3-R | 20.18 | 10.76 | 1.50 | .078 | 80.74 | 43.04 | .75 | .312 |
| CTX25-3-R | 24.58 | 15.64 | .98 | .086 | 98.30 | 62.56 | .49 | .346 |
| CTX33-3-R | 32.86 | 19.69 | .96 | .083 | 131.42 | 78.77 | .48 | .331 |
| CTX50-3-R | 50.78 | 27.18 | .94 | .239 | 203.14 | 108.71 | .47 | .956 |
| CTX68-3-R | 67.42 | 36.53 | .80 | .277 | 269.66 | 146.11 | .40 | 1.109 |
| CTX100-3-R | 101.40 | 52.48 | .70 | .345 | 405.60 | 209.93 | .35 | 1.381 |
| CTX150-3-R | 149.78 | 97.16 | .38 | .430 | 599.14 | 388.63 | .19 | 1.718 |
| CTX200-3-R | 198.74 | 119.18 | .39 | .619 | 794.98 | 476.71 | .20 | 2.475 |
| CTX300-3-R | 301.06 | 157.44 | .40 | .951 | 1204.22 | 629.75 | .20 | 3.083 |
| CTX0.47-4-R | .44 | .32 | 7.00 | .004 | 1.76 | 1.29 | 3.50 | .016 |
| CTX0.68-4-R | .78 | .55 | 6.00 | .005 | 3.14 | 2.21 | 3.00 | .020 |
| CTX1-4-R | 1.23 | .85 | 5.00 | .006 | 4.90 | 3.41 | 2.50 | .024 |
| CTX2-4-R | 1.76 | 1.06 | 4.90 | .007 | 7.06 | 4.24 | 2.45 | .028 |
| CTX5-4-R | 4.90 | 2.59 | 4.40 | .014 | 19.60 | 10.37 | 2.20 | .056 |
| CTX8-4-R | 8.28 | 4.29 | 3.50 | .018 | 33.12 | 17.14 | 1.75 | .072 |
| CTX10-4-R | 9.60 | 4.82 | 3.40 | .019 | 38.42 | 19.28 | 1.70 | .078 |
| CTX15-4-R | 14.16 | 6.76 | 3.00 | .024 | 56.64 | 27.03 | 1.50 | .096 |
| CTX20-4-R | 19.60 | 10.68 | 2.10 | .055 | 78.40 | 42.73 | 1.05 | .220 |
| CTX25-4-R | 25.92 | 13.32 | 2.00 | .063 | 103.68 | 53.27 | 1.00 | .253 |
| CTX33-4-R | 33.12 | 16.82 | 1.80 | .072 | 132.50 | 67.27 | .90 | .287 |
| CTX50-4-R | 50.18 | 25.03 | 1.50 | .111 | 200.70 | 100.11 | .75 | .443 |
| CTX68-4-R | 67.08 | 35.29 | 1.20 | .157 | 268.32 | 141.15 | .60 | .630 |
| CTX100-4-R | 99.23 | 54.56 | .92 | .302 | 396.90 | 218.25 | .46 | 1.210 |
| CTX150-4-R | 148.23 | 77.17 | .82 | .372 | 592.90 | 308.69 | .41 | 1.488 |
| CTX200-4-R | 200.70 | 111.08 | .64 | .545 | 802.82 | 444.32 | .32 | 2.180 |
| CTX300-4-R | 298.12 | 147.92 | .62 | .672 | 1192.46 | 591.66 | .31 | 2.687 |

| Part Number | Rated Inductance (μH) | Parallel Ratings | | | | | Series Ratings | | | | |
|--------------|-----------------------|-----------------------------|-------------------------|--------------------|------------------------|----------------|-----------------------------|-------------------------|--------------------|------------------------|----------------|
| | | OCL (1) nominal +/-25% (μH) | I sat. (2) Amperes Peak | I rms. (3) Amperes | DCR Ω (4) max. @ 20°C. | Volt (7) μ-Sec | OCL (1) nominal +/-25% (μH) | I sat. (2) Amperes Peak | I rms. (3) Amperes | DCR Ω (4) max. @ 20°C. | Volt (7) μ-Sec |
| CTX0.33-1A-R | 0.33 | 0.402 | 12.5 | 10.0 | 0.0037 | .93 | 1.61 | 6.25 | 4.98 | 0.015 | 1.86 |
| CTX0.68-1A-R | 0.68 | 0.752 | 9.4 | 9.0 | 0.0046 | 1.24 | 3.01 | 4.69 | 4.48 | 0.0185 | 2.49 |
| CTX1-1A-R | 1.0 | 1.18 | 7.5 | 7.26 | 0.0070 | 1.55 | 4.70 | 3.75 | 3.63 | 0.0282 | 3.11 |
| CTX2-1A-R | 2.0 | 2.30 | 5.36 | 5.64 | 0.012 | 2.17 | 9.21 | 2.68 | 2.82 | 0.0470 | 4.35 |
| CTX5-1A-R | 5.0 | 4.70 | 3.75 | 4.27 | 0.020 | 3.11 | 18.8 | 1.88 | 2.13 | 0.082 | 6.21 |
| CTX8-1A-R | 8.0 | 7.94 | 2.88 | 3.37 | 0.033 | 4.04 | 31.77 | 1.44 | 1.69 | 0.130 | 8.08 |
| CTX10-1A-R | 10.0 | 10.58 | 2.5 | 2.84 | 0.046 | 4.66 | 42.30 | 1.25 | 1.42 | 0.183 | 9.32 |
| CTX15-1A-R | 15.0 | 15.23 | 2.08 | 2.07 | 0.087 | 5.59 | 60.91 | 1.04 | 1.03 | 0.348 | 11.2 |
| CTX20-1A-R | 20.0 | 20.73 | 1.79 | 1.71 | 0.127 | 6.52 | 82.91 | 0.89 | 0.86 | 0.507 | 13.0 |
| CTX25-1A-R | 25.0 | 24.86 | 1.63 | 1.46 | 0.173 | 7.14 | 99.45 | 0.82 | 0.73 | 0.693 | 14.3 |
| CTX33-1A-R | 33.0 | 34.26 | 1.39 | 1.22 | 0.249 | 8.39 | 137.1 | 0.69 | 0.61 | 0.995 | 16.8 |
| CTX50-1A-R | 50.0 | 51.18 | 1.14 | 0.99 | 0.381 | 10.3 | 204.7 | 0.57 | 0.49 | 1.524 | 20.5 |
| CTX68-1A-R | 68.0 | 67.87 | 0.99 | 0.92 | 0.437 | 11.8 | 271.5 | 0.49 | 0.46 | 1.749 | 23.6 |
| CTX100-1A-R | 100.0 | 99.45 | 0.82 | 0.74 | 0.686 | 14.3 | 397.8 | 0.41 | 0.37 | 2.745 | 28.6 |
| CTX150-1A-R | 150.0 | 147.4 | 0.67 | 0.67 | 0.832 | 17.4 | 589.6 | 0.33 | 0.33 | 3.329 | 34.8 |
| CTX200-1A-R | 200.0 | 198.6 | 0.58 | 0.62 | 0.963 | 20.2 | 794.3 | 0.29 | 0.31 | 3.854 | 40.4 |
| CTX300-1A-R | 300.0 | 300.8 | 0.47 | 0.56 | 1.181 | 24.9 | 1203 | 0.23 | 0.28 | 4.726 | 49.7 |
| CTX0.33-2A-R | 0.33 | 0.284 | 18.8 | 10.9 | 0.0033 | .85 | 1.14 | 9.38 | 5.47 | 0.0132 | 1.71 |
| CTX0.68-2A-R | 0.68 | 0.675 | 12.5 | 9.4 | 0.0045 | 1.28 | 2.70 | 6.25 | 4.68 | 0.0180 | 2.56 |
| CTX1-2A-R | 1.0 | 1.26 | 9.38 | 8.22 | 0.0058 | 1.71 | 5.06 | 4.69 | 4.11 | 0.0233 | 3.42 |
| CTX2-2A-R | 2.0 | 1.98 | 7.50 | 6.74 | 0.0090 | 2.14 | 7.90 | 3.75 | 3.37 | 0.035 | 4.27 |
| CTX5-2A-R | 5.0 | 5.06 | 4.69 | 4.34 | 0.021 | 3.42 | 20.22 | 2.34 | 2.17 | 0.084 | 6.84 |
| CTX8-2A-R | 8.0 | 7.90 | 3.75 | 3.50 | 0.032 | 4.27 | 31.60 | 1.88 | 1.75 | 0.129 | 8.55 |
| CTX10-2A-R | 10.0 | 11.38 | 3.13 | 2.89 | 0.047 | 5.13 | 45.50 | 1.56 | 1.45 | 0.188 | 10.3 |
| CTX15-2A-R | 15.0 | 15.48 | 2.68 | 2.69 | 0.054 | 5.98 | 61.94 | 1.34 | 1.35 | 0.218 | 12.0 |
| CTX20-2A-R | 20.0 | 20.22 | 2.34 | 2.24 | 0.078 | 6.84 | 80.90 | 1.17 | 1.12 | 0.313 | 13.7 |
| CTX25-2A-R | 25.0 | 25.60 | 2.08 | 1.89 | 0.111 | 7.69 | 102.38 | 1.04 | 0.94 | 0.443 | 15.4 |
| CTX33-2A-R | 33.0 | 34.84 | 1.79 | 1.56 | 0.162 | 8.97 | 139.4 | 0.89 | 0.78 | 0.649 | 17.9 |
| CTX50-2A-R | 50.0 | 49.38 | 1.50 | 1.28 | 0.240 | 10.7 | 197.5 | 0.75 | 0.64 | 0.961 | 21.4 |
| CTX68-2A-R | 68.0 | 66.44 | 1.29 | 1.07 | 0.342 | 12.4 | 265.8 | 0.65 | 0.54 | 1.367 | 24.8 |
| CTX100-2A-R | 100.0 | 102.38 | 1.04 | 0.75 | 0.695 | 15.4 | 409.5 | 0.52 | 0.38 | 2.778 | 30.8 |
| CTX150-2A-R | 150.0 | 152.9 | 0.85 | 0.68 | 0.842 | 18.8 | 611.8 | 0.43 | 0.34 | 3.366 | 37.6 |
| CTX200-2A-R | 200.0 | 197.5 | 0.75 | 0.64 | 0.950 | 21.4 | 790.0 | 0.38 | 0.32 | 3.800 | 42.7 |
| CTX300-2A-R | 300.0 | 303.7 | 0.60 | 0.58 | 1.174 | 26.5 | 1215 | 0.30 | 0.29 | 4.697 | 53.0 |
| CTX0.33-3A-R | 0.33 | 0.368 | 15.0 | 11.4 | 0.0032 | 0.97 | 1.47 | 7.50 | 5.72 | 0.0128 | 1.93 |
| CTX0.68-3A-R | 0.68 | 0.688 | 11.3 | 9.3 | 0.0048 | 1.29 | 2.75 | 5.63 | 4.64 | 0.0194 | 2.58 |
| CTX1-3A-R | 1.0 | 1.08 | 9.0 | 8.38 | 0.0059 | 1.61 | 4.20 | 4.50 | 4.19 | 0.0238 | 3.22 |
| CTX2-3A-R | 2.0 | 2.11 | 6.43 | 7.26 | 0.0079 | 2.26 | 8.43 | 3.21 | 3.63 | 0.0317 | 4.51 |
| CTX5-3A-R | 5.0 | 5.20 | 4.09 | 5.24 | 0.015 | 3.54 | 20.81 | 2.05 | 2.62 | 0.061 | 7.09 |
| CTX8-3A-R | 8.0 | 8.43 | 3.21 | 4.23 | 0.023 | 4.51 | 33.77 | 1.61 | 2.12 | 0.093 | 9.02 |
| CTX10-3A-R | 10.0 | 9.68 | 3.00 | 3.64 | 0.032 | 4.83 | 38.70 | 1.50 | 1.82 | 0.126 | 9.67 |
| CTX15-3A-R | 15.0 | 15.52 | 2.37 | 3.25 | 0.039 | 6.12 | 62.09 | 1.18 | 1.63 | 0.158 | 12.2 |
| CTX20-3A-R | 20.0 | 20.81 | 2.05 | 2.43 | 0.071 | 7.09 | 83.25 | 1.02 | 1.22 | 0.282 | 14.2 |
| CTX25-3A-R | 25.0 | 24.77 | 1.88 | 2.34 | 0.076 | 7.73 | 99.07 | 0.94 | 1.17 | 0.306 | 15.5 |
| CTX33-3A-R | 33.0 | 33.71 | 1.61 | 1.93 | 0.112 | 9.02 | 134.8 | 0.80 | 0.96 | 0.449 | 18.0 |
| CTX50-3A-R | 50.0 | 49.71 | 1.32 | 1.56 | 0.171 | 11.0 | 198.8 | 0.66 | 0.78 | 0.686 | 21.9 |

1) Open Circuit Inductance Test Parameters: 100kHz, 0.250 Vrms, 0.0 Adc
 Parallel: (1,4 - 3,2) Series: (1 - 3) tie (2 - 4)
 2) Peak current for approximately 30% roll-off
 3) RMS current, delta temp. of 40° C ambient temperature of 85° C
 4) DCR @ 20°C

5) Hipot rating: winding to winding: 300Vdc min.
 6) Turns Ratio: (1-2):(4-3) 1:1
 7) Applied volt-time product (v-us) across the inductor. This value represents the applied V-us at 300KHz necessary to generate a core loss equal to 10% of the total losses for a 40°C temperature rise.

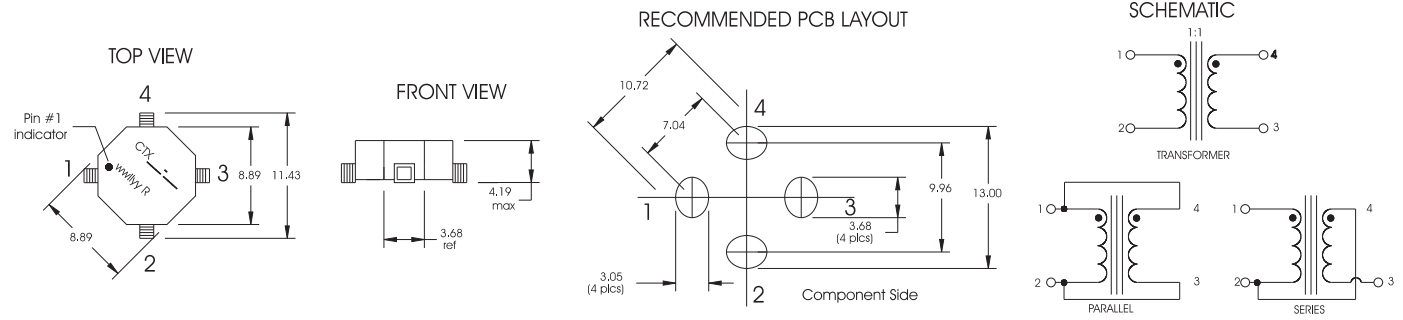
| Part Number | Rated Inductance (μH) | Parallel Ratings | | | | | Series Ratings | | | | |
|--------------|-----------------------|-----------------------------|-------------------------|--------------------|------------------------|----------------|-----------------------------|-------------------------|--------------------|------------------------|----------------|
| | | OCL (1) nominal +/-25% (μH) | I sat. (2) Amperes Peak | I rms. (3) Amperes | DCR Ω (4) max. @ 20°C. | Volt (7) μ-Sec | OCL (1) nominal +/-25% (μH) | I sat. (2) Amperes Peak | I rms. (3) Amperes | DCR Ω (4) max. @ 20°C. | Volt (7) μ-Sec |
| CTX68-3A-R | 68.0 | 68.80 | 1.13 | 1.28 | 0.253 | 12.9 | 275.2 | 0.56 | 0.64 | 1.013 | 25.8 |
| CTX100-3A-R | 100.0 | 99.07 | 0.94 | 1.05 | 0.379 | 15.5 | 396.3 | 0.47 | 0.53 | 1.514 | 30.9 |
| CTX150-3A-R | 150.0 | 149.7 | 0.76 | 0.86 | 0.571 | 19.0 | 598.7 | 0.38 | 0.43 | 2.283 | 38.0 |
| CTX200-3A-R | 200.0 | 198.8 | 0.66 | 0.71 | 0.829 | 21.9 | 795.3 | 0.33 | 0.35 | 3.315 | 43.8 |
| CTX300-3A-R | 300.0 | 296.2 | 0.54 | 0.56 | 1.309 | 26.7 | 1185 | 0.27 | 0.28 | 5.236 | 53.5 |
| CTX0.33-4A-R | 0.33 | 0.313 | 22.5 | 12.2 | 0.0030 | 0.98 | 1.25 | 11.25 | 6.09 | 0.0119 | 1.96 |
| CTX0.68-4A-R | 0.68 | 0.744 | 15.0 | 10.6 | 0.0040 | 1.47 | 2.98 | 7.50 | 5.28 | 0.0158 | 2.94 |
| CTX1-4A-R | 1.0 | 1.39 | 11.25 | 9.23 | 0.0052 | 1.96 | 5.57 | 5.63 | 4.62 | 0.0207 | 3.93 |
| CTX2-4A-R | 2.0 | 2.18 | 9.00 | 8.38 | 0.0063 | 2.45 | 8.70 | 4.50 | 4.19 | 0.0251 | 4.91 |
| CTX5-4A-R | 5.0 | 4.26 | 6.43 | 7.21 | 0.0085 | 3.44 | 17.05 | 3.21 | 3.61 | 0.0339 | 6.87 |
| CTX8-4A-R | 8.0 | 8.70 | 4.50 | 5.49 | 0.015 | 4.91 | 34.80 | 2.25 | 2.74 | 0.059 | 9.81 |
| CTX10-4A-R | 10.0 | 10.53 | 4.09 | 4.67 | 0.020 | 5.40 | 42.11 | 2.05 | 2.33 | 0.081 | 10.8 |
| CTX15-4A-R | 15.0 | 14.70 | 3.46 | 3.87 | 0.029 | 6.38 | 58.81 | 1.73 | 1.94 | 0.117 | 12.8 |
| CTX20-4A-R | 20.0 | 19.58 | 3.00 | 3.62 | 0.034 | 7.36 | 78.30 | 1.50 | 1.81 | 0.135 | 14.7 |
| CTX25-4A-R | 25.0 | 25.14 | 2.65 | 3.02 | 0.048 | 8.34 | 100.51 | 1.32 | 1.51 | 0.193 | 16.7 |
| CTX33-4A-R | 33.0 | 34.80 | 2.25 | 2.49 | 0.071 | 9.81 | 139.2 | 1.13 | 1.25 | 0.283 | 19.6 |
| CTX50-4A-R | 50.0 | 50.11 | 1.88 | 2.05 | 0.104 | 11.8 | 200.4 | 0.94 | 1.03 | 0.418 | 23.6 |
| CTX68-4A-R | 68.0 | 68.21 | 1.61 | 1.70 | 0.153 | 13.7 | 272.8 | 0.80 | 0.85 | 0.612 | 27.5 |
| CTX100-4A-R | 100.0 | 100.57 | 1.32 | 1.37 | 0.235 | 16.7 | 402.3 | 0.66 | 0.69 | 0.939 | 33.4 |
| CTX150-4A-R | 150.0 | 153.5 | 1.07 | 1.10 | 0.365 | 20.6 | 613.9 | 0.54 | 0.55 | 1.462 | 41.2 |
| CTX200-4A-R | 200.0 | 200.4 | 0.94 | 0.92 | 0.521 | 23.6 | 801.8 | 0.47 | 0.46 | 2.085 | 47.1 |
| CTX300-4A-R | 300.0 | 302.8 | 0.76 | 0.75 | 0.787 | 29.0 | 1211 | 0.38 | 0.37 | 3.148 | 57.9 |

1) Open Circuit Inductance Test Parameters: 100kHz, 0.250 Vrms, 0.0 Adc
 Parallel: (1,4 - 3,2) Series: (1 - 3) tie (2 - 4)
 2) Peak current for approximately 30% roll-off
 3) RMS current, delta temp. of 40° C ambient temperature of 85° C
 4) DCR @ 20°C

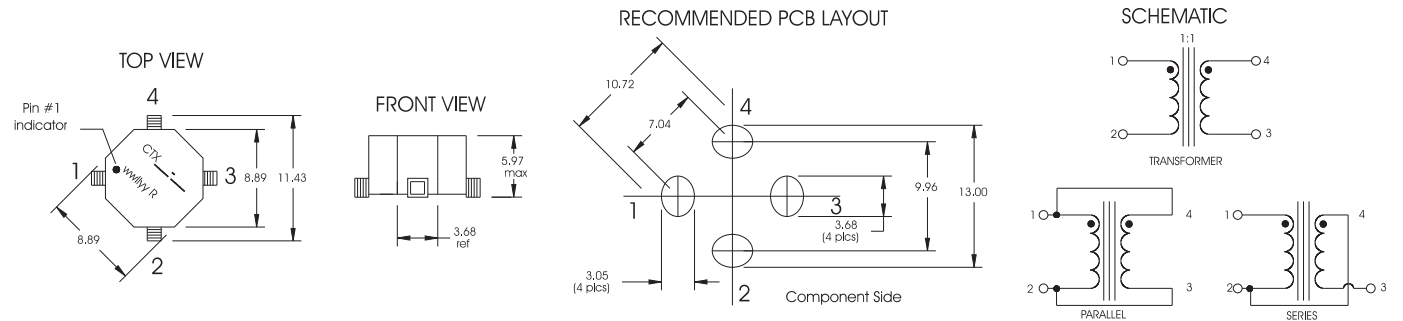
5) Hipot rating: winding to winding: 300Vdc min.
 6) Turns Ratio: (1-2):(4-3) 1:1
 7) Applied volt-time product (v-us) across the inductor. This value represents the applied V-us at 300KHz necessary to generate a core loss equal to 10% of the total losses for a 40°C temperature rise.

Mechanical Diagrams

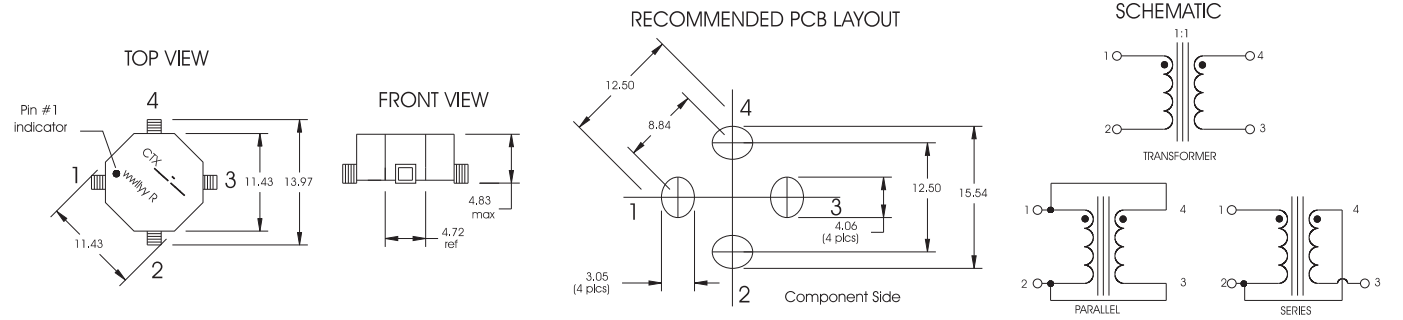
CTX 1, 1P, 1A Series



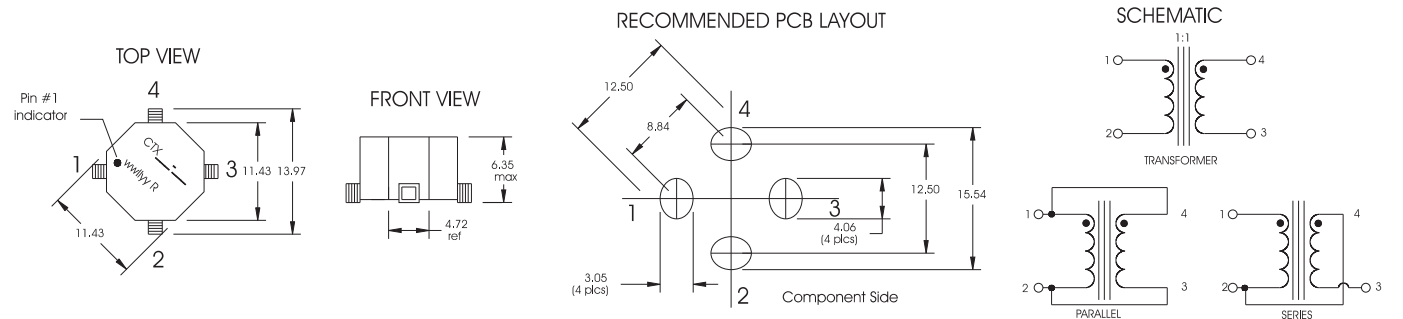
CTX 2, 2P, 2A Series



CTX 3, 3P, 3A Series



CTX 4, 4P, 4A Series



Dimensions in Millimeters.

w/wlly = (date code) R = revision level

Packaging Information

CTX 1, 1P, 1A Series



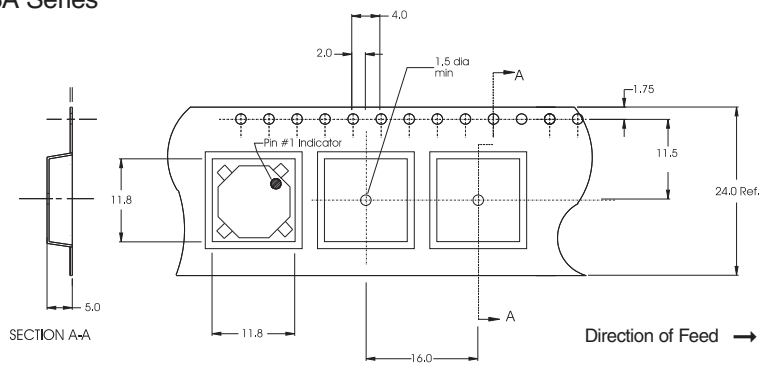
Parts packaged on 13" Diameter reel,
 1,100 parts per reel.

CTX 2, 2P, 2A Series



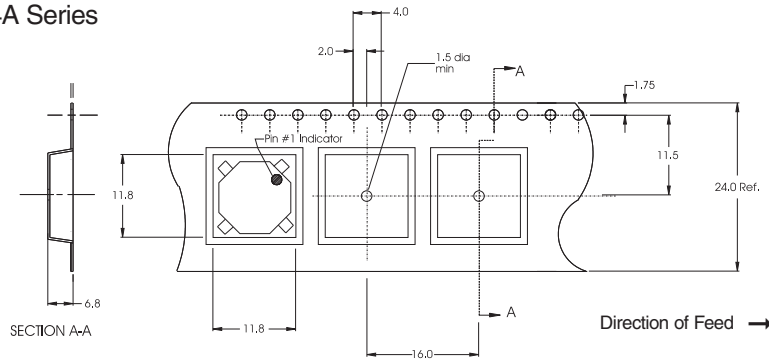
Parts packaged on 13" Diameter reel,
 800 parts per reel.

CTX 3, 3P, 3A Series



Parts packaged on 13" Diameter reel,
 800 parts per reel.

CTX 4, 4P, 4A Series



Parts packaged on 13" Diameter reel,
 600 parts per reel.

Dimensions are in millimeters.

Performance Characteristics



- **INDUCTANCE VS. CURRENT:**
 Inductance will fall off as DC Current is increased. (See Inductance vs. Current graph).
- **FREQUENCY RESPONSE:**
 Wide-band frequency response to 1 megaHertz.
- **CURRENT LIMITATION:**
 The maximum allowable currents are defined by the internal "hot-spot" temperatures which are limited to 130°C, including ambient.

OCTA-PAC® PLUS Typical Inductance vs. DC Current



OCTA-PAC® PLUS Winding Loss Derating with Core Loss



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