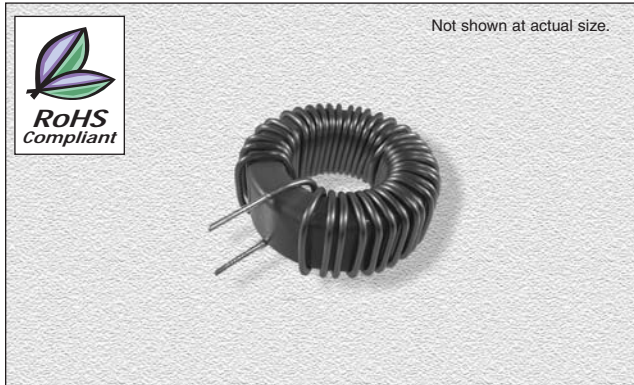


CTCDT Series

From 4.7 μH to 56 μH



CHARACTERISTICS

Description: Toroidal Chokes for Class D amplifiers

Applications: Powered Loudspeakers, electronic motor drives, portable amps, PA systems & car amps.

Testing: Inductance tested at 10kHz, 10 gauss, 0Adc

Winding: Single layer wound for high self-resonant frequency

Core: 10 permeability Carbonyl Micrometals© Core

Packaging: Bulk packaged

Additional Information:

* ΔL of less than 10% at currents greater than 100A

* Class-D Operation 250kHz - 500kHz

* High Linearity Under Peak Bias Conditions

* Extremely Low Loss Under Typical Class-D ripple Current Conditions

* Reduced THD Due to Highest Linearity

* Custom values & horizontal mounted configurations available upon request.

Note: Application should limit long term absolute temperature of component to be 75°C max.

Miscellaneous: RoHS Compliant.

Samples available. See website for ordering information.

SPECIFICATIONS

| Part Number | Closest Standard Value μHy | Nominal Initial Inductance (0 ADC) μHy ($\pm 7\%$) | DC Resistance (ref., 20°C.) Ω | Long-Term r.m.s. current guideline Amperes r.m.s. | Peak Current for 5% Inductance Drop Amperes peak | Peak Current for 10% Inductance Drop Amperes peak | Core Loss (typ.) at 100 kHz, 140 Gauss | Core Loss (typ.) at 500 kHz, 50 Gauss |
|--------------|---------------------------------------|---|--------------------------------------|---|--|---|--|---------------------------------------|
| CTCDT- 09401 | 4.7 | 4.84 | 0.011 | 8.6 | 35.8 | 75.6 | 41 mW | 26 mW |
| CTCDT- 09402 | 6.8 | 6.59 | 0.015 | 6.8 | 30.7 | 64.8 | | |
| CTCDT- 09503 | 10.0 | 10.3 | 0.029 | 4.3 | 24.6 | 51.9 | | |
| CTCDT- 09404 | 12.0 | 12.1 | 0.036 | 3.4 | 22.6 | 47.8 | | |
| CTCDT- 09405 | 15.0 | 14.8 | 0.040 | 3.4 | 20.5 | 43.2 | | |
| CTCDT- 09406 | 18.0 | 17.8 | 0.064 | 2.1 | 18.7 | 39.5 | | |
| CTCDT- 09407 | 22.0 | 21.8 | 0.072 | 2.1 | 16.9 | 35.6 | | |
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| CTCDT- 10601 | 4.7 | 4.87 | 0.009 | 10.9 | 49.2 | 103.8 | 57 mW | 36 mW |
| CTCDT- 10602 | 6.8 | 6.53 | 0.012 | 8.6 | 42.5 | 89.7 | | |
| CTCDT- 10603 | 10.0 | 9.84 | 0.018 | 6.8 | 34.6 | 73.1 | | |
| CTCDT- 10604 | 12.0 | 12.2 | 0.025 | 5.4 | 31.2 | 65.8 | | |
| CTCDT- 10605 | 15.0 | 14.7 | 0.028 | 5.4 | 28.3 | 59.8 | | |
| CTCDT- 10606 | 18.0 | 18.5 | 0.039 | 4.3 | 25.3 | 53.3 | | |
| CTCDT- 10607 | 22.0 | 21.6 | 0.050 | 3.4 | 23.4 | 49.3 | | |
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| CTCDT- 13001 | 4.7 | 4.85 | 0.008 | 13.7 | 56.8 | 119.9 | 110 mW | 70 mW |
| CTCDT- 13002 | 6.8 | 6.88 | 0.009 | 13.7 | 47.7 | 100.7 | | |
| CTCDT- 13003 | 10.0 | 9.9 | 0.011 | 13.7 | 39.7 | 83.9 | | |
| CTCDT- 13004 | 12.0 | 12.0 | 0.015 | 10.9 | 36.1 | 76.3 | | |
| CTCDT- 13005 | 15.0 | 15.1 | 0.022 | 8.6 | 32.2 | 68.0 | | |
| CTCDT- 13006 | 18.0 | 17.6 | 0.027 | 6.8 | 29.8 | 62.9 | | |
| CTCDT- 13007 | 22.0 | 22.3 | 0.036 | 5.4 | 26.5 | 55.9 | | |
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| CTCDT- 15401 | 18.0 | 18.1 | 0.020 | 10.9 | 40.4 | 85.3 | 204 mW | 129 mW |
| CTCDT- 15402 | 22.0 | 22.4 | 0.022 | 10.9 | 36.4 | 76.8 | | |
| CTCDT- 15403 | 27.0 | 27.1 | 0.030 | 8.6 | 33.1 | 69.8 | | |
| CTCDT- 15404 | 33.0 | 33.6 | 0.040 | 6.8 | 29.7 | 62.7 | | |
| CTCDT- 15405 | 39.0 | 39.3 | 0.045 | 6.8 | 27.4 | 57.9 | | |
| CTCDT- 15406 | 47.0 | 47.1 | 0.062 | 5.4 | 25.1 | 52.9 | | |
| CTCDT- 15407 | 56.0 | 55.6 | 0.085 | 4.3 | 23.1 | 48.7 | | |

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PHYSICAL DIMENSIONS

| Part Number | Outside Diameter (maximum) Inches | Width (maximum) Inches | Lead Space Dimension Inches | Lead Diameter Inches |
|--------------|---|------------------------------|-----------------------------------|----------------------------|
| CTCDT- 09401 | 1.125 | 0.47 | 0.41 | 0.052 |
| CTCDT- 09402 | 1.125 | 0.46 | 0.4 | 0.047 |
| CTCDT- 09503 | 1.1 | 0.45 | 0.38 | 0.037 |
| CTCDT- 09404 | 1.07 | 0.43 | 0.38 | 0.033 |
| CTCDT- 09405 | 1.07 | 0.43 | 0.38 | 0.033 |
| CTCDT- 09406 | 1.05 | 0.4 | 0.37 | 0.026 |
| CTCDT- 09407 | 1.05 | 0.4 | 0.37 | 0.026 |
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| CTCDT- 10601 | 1.25 | 0.62 | 0.54 | 0.058 |
| CTCDT- 10602 | 1.25 | 0.62 | 0.54 | 0.052 |
| CTCDT- 10603 | 1.25 | 0.62 | 0.52 | 0.047 |
| CTCDT- 10604 | 1.22 | 0.6 | 0.52 | 0.042 |
| CTCDT- 10605 | 1.22 | 0.6 | 0.52 | 0.042 |
| CTCDT- 10606 | 1.21 | 0.59 | 0.52 | 0.037 |
| CTCDT- 10607 | 1.21 | 0.58 | 0.52 | 0.033 |
| <hr/> | | | | |
| CTCDT- 13001 | 1.52 | 0.66 | 0.59 | 0.066 |
| CTCDT- 13002 | 1.52 | 0.66 | 0.59 | 0.066 |
| CTCDT- 13003 | 1.52 | 0.66 | 0.59 | 0.066 |
| CTCDT- 13004 | 1.5 | 0.63 | 0.59 | 0.058 |
| CTCDT- 13005 | 1.5 | 0.63 | 0.57 | 0.052 |
| CTCDT- 13006 | 1.49 | 0.62 | 0.56 | 0.047 |
| CTCDT- 13007 | 1.48 | 0.62 | 0.56 | 0.042 |
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| CTCDT- 15401 | 1.79 | 0.79 | 0.69 | 0.058 |
| CTCDT- 15402 | 1.79 | 0.79 | 0.69 | 0.058 |
| CTCDT- 15403 | 1.78 | 0.78 | 0.69 | 0.052 |
| CTCDT- 15404 | 1.77 | 0.75 | 0.67 | 0.047 |
| CTCDT- 15405 | 1.77 | 0.75 | 0.67 | 0.047 |
| CTCDT- 15406 | 1.75 | 0.74 | 0.67 | 0.042 |
| CTCDT- 15407 | 1.73 | 0.73 | 0.66 | 0.037 |

