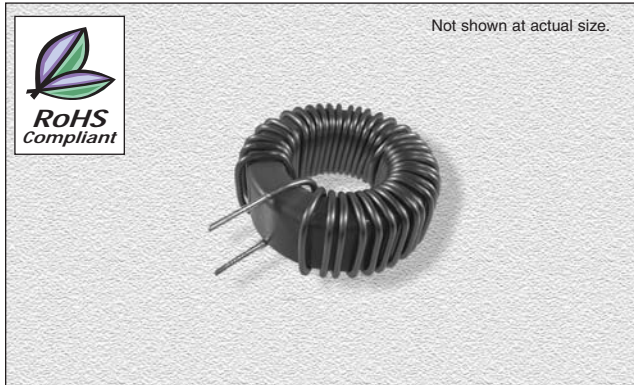


## CTCDT Series

From 4.7  $\mu\text{H}$  to 56  $\mu\text{H}$



### 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:**

\*  $\Delta L$  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 $\mu\text{Hy}$	Nominal Initial Inductance (0 ADC) $\mu\text{Hy}$ ( $\pm 7\%$ )	DC Resistance (ref., 20°C.) $\Omega$	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		
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		
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		
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		

05.07.09

## 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
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
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
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

