

CTCDTF 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 is 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% a 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 μH	Nominal Initial Inductance (0 ADC) μH ($\pm 7\%$)	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
CTCDTF-09401	4.7	4.84	0.011	8.6	35.8	75.6	41 mW	26 mW
CTCDTF-09402	6.8	6.59	0.015	6.8	30.7	64.8		
CTCDTF-09403	10.0	10.3	0.029	4.3	24.6	51.9		
CTCDTF-09404	12.0	12.1	0.036	3.4	22.6	47.8		
CTCDTF-09405	15.0	14.8	0.040	3.4	20.5	43.2		
CTCDTF-09406	18.0	17.8	0.064	2.1	18.7	39.5		
CTCDTF-09407	22.0	21.8	0.072	2.1	16.9	35.6		
CTCDTF-10601	4.7	4.87	0.009	10.9	49.2	103.8	57 mW	36 mW
CTCDTF-10602	6.8	6.53	0.012	8.6	42.5	89.7		
CTCDTF-10603	10.0	9.84	0.018	6.8	34.6	73.1		
CTCDTF-10604	12.0	12.2	0.025	5.4	31.2	65.8		
CTCDTF-10605	15.0	14.7	0.028	5.4	28.3	59.8		
CTCDTF-10606	18.0	18.5	0.039	4.3	25.3	53.3		
CTCDTF-10607	22.0	21.6	0.050	3.4	23.4	49.3		
CTCDTF-13001	4.7	4.85	0.008	13.7	56.8	119.9	110 mW	70 mW
CTCDTF-13002	6.8	6.88	0.009	13.7	47.7	100.7		
CTCDTF-13003	10.0	9.9	0.011	13.7	39.7	83.9		
CTCDTF-13004	12.0	12.0	0.015	10.9	36.1	76.3		
CTCDTF-13005	15.0	15.1	0.022	8.6	32.2	68.0		
CTCDTF-13006	18.0	17.6	0.027	6.8	29.8	62.9		
CTCDTF-13007	22.0	22.3	0.036	5.4	26.5	55.9		
CTCDTF-15401	18.0	18.1	0.020	10.9	40.4	85.3	204 mW	129 mW
CTCDTF-15402	22.0	22.4	0.022	10.9	36.4	76.8		
CTCDTF-15403	27.0	27.1	0.030	8.6	33.1	69.8		
CTCDTF-15404	33.0	33.6	0.040	6.8	29.7	62.7		
CTCDTF-15405	39.0	39.3	0.045	6.8	27.4	57.9		
CTCDTF-15406	47.0	47.1	0.062	5.4	25.1	52.9		
CTCDTF-15407	56.0	55.6	0.085	4.3	23.1	48.7		

PHYSICAL DIMENSIONS

Part Number	Outside Diameter (maximum) Inches	Width (maximum) Inches	Lead Space Dimension Inches	Lead Diameter Inches
CTCDDTF-09401	1.125	0.47	0.41	0.052
CTCDDTF-09402	1.125	0.46	0.4	0.047
CTCDDTF-09403	1.1	0.45	0.38	0.037
CTCDDTF-09404	1.07	0.43	0.38	0.033
CTCDDTF-09405	1.07	0.43	0.38	0.033
CTCDDTF-09406	1.05	0.4	0.37	0.026
CTCDDTF-09407	1.05	0.4	0.37	0.026
CTCDDTF-10601	1.25	0.62	0.54	0.058
CTCDDTF-10602	1.25	0.62	0.54	0.052
CTCDDTF-10603	1.25	0.62	0.52	0.047
CTCDDTF-10604	1.22	0.6	0.52	0.042
CTCDDTF-10605	1.22	0.6	0.52	0.042
CTCDDTF-10606	1.21	0.59	0.52	0.037
CTCDDTF-10607	1.21	0.58	0.52	0.033
CTCDDTF-13001	1.52	0.66	0.59	0.066
CTCDDTF-13002	1.52	0.66	0.59	0.066
CTCDDTF-13003	1.52	0.66	0.59	0.066
CTCDDTF-13004	1.5	0.63	0.59	0.058
CTCDDTF-13005	1.5	0.63	0.57	0.052
CTCDDTF-13006	1.49	0.62	0.56	0.047
CTCDDTF-13007	1.48	0.62	0.56	0.042
CTCDDTF-15401	1.79	0.79	0.69	0.058
CTCDDTF-15402	1.79	0.79	0.69	0.058
CTCDDTF-15403	1.78	0.78	0.69	0.052
CTCDDTF-15404	1.77	0.75	0.67	0.047
CTCDDTF-15405	1.77	0.75	0.67	0.047
CTCDDTF-15406	1.75	0.74	0.67	0.042
CTCDDTF-15407	1.73	0.73	0.66	0.037

