

Application of Toroid types

- Common mode choke
- Excellent interference suppression.
for line filter (HM2A, HM3A, HM5A, HM6A)
- Signal transformer
- Highest permeability for small volume
(HM6A)

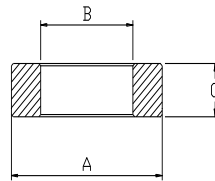
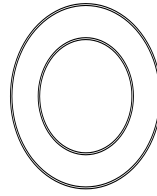


Fig. 1

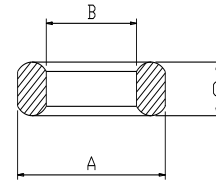
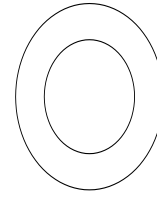


Fig. 2

Product overview Toroid type

Model	Dimension and Parameter							Fig
	A	B	C	L_e (mm)	A_e (mm ²)	V_e (mm ³)	C	
T 0803B	8.1 ±0.3	4.1 ±0.3	3.1 ±0.3	17.80	5.80	102	0.408	1
T 1004	10.0 ±0.3	6.0 ±0.3	4.0 ±0.25	24.10	7.60	183	0.398	1
T 12.7	12.7 ±0.3	7.1 ±0.3	4.7 ±0.25	29.40	12.60	370	0.538	1
T 1305	13.0 ±0.5	8.0 ±0.3	4.5 ±0.5	29.50	14.32	422	0.610	1
T 1305D	12.7 ±0.4	8.0 ±0.2	4.5 ±0.3	31.40	10.30	3200	0.410	1
T 1305T	13.0 ±0.5	7.0 ±0.3	5.0 ±0.5	29.50	14.53	4000	0.620	1
T 1306T	12.7 ±0.4	8.0 ±0.2	6.35 ±0.3	31.40	14.40	453	0.579	1
T 1308	13.0 ±0.5	8.0 0	8.0 ±0.5	30.60	21.20	649	0.871	1
T 1407B	14.0 ±0.35	8.0 ±0.3	7.0 ±0.3	32.80	20.30	665	0.776	1
T 1407H	14.0 ±0.35	8.0 ±0.3	7.0 ±0.3	32.80	20.50	6700	0.780	1
T 1604	16.0 ±0.35	10.0 ±0.3	4.0 ±0.2	39.37	11.57	453	0.375	1
T 1607	16.0 ±0.35	10.0 ±0.3	7.0 ±0.3	39.37	20.58	810	0.657	1
T 1805	18.0 ±0.3	10.0 ±0.3	5.0 ±0.3	41.60	19.40	810	0.590	1
T 1808B	18.0 ±0.3	12.0 ±0.3	8.0 ±0.3	45.86	23.67	1100	0.650	1
T 1906	19.0 ±0.3	13.0 ±0.3	6.0 ±0.2	49.10	17.60	862	0.450	1
T 1906B	19.0 ±0.3	12.6 ±0.3	6.0 ±0.2	48.30	18.70	904	0.488	1
T 1910	19.0 ±0.3	13.0 ±0.3	10.0 ±0.2	49.10	29.40	1440	0.750	1
T 1911	19.0 ±0.3	13.0 ±0.3	11.0 ±0.15	49.10	32.40	1590	0.830	1
T 2007B	20.0 ±0.3	10.0 ±0.3	7.0 ±0.3	43.60	33.40	1456	0.965	1
T 2008	20.0 ±0.4	12.0 ±0.3	8.0 +0.3 -0.2	48.10	31.10	1497	0.812	1
T 2206B	22.0 ±0.4	14.0 ±0.4	6.5 ±0.3	54.70	25.40	1386	0.583	1
T 2208B	22.0 ±0.4	14.0 ±0.4	8.0 ±0.3	54.70	31.20	1708	0.719	1

Model	Dimension and Parameter							Fig
	A	B	C	L _e (mm)	A _e (mm ²)	V _e (mm ³)	C	
T 2210B	22.0 ±0.4	14.0 ±0.4	10.0 ±0.3	54.67	39.11	2138	0.900	1
T 2213	22.1 ±0.4	13.7 ±0.3	12.7 ±0.25	54.10	52.10	2822	1.210	1
T 2213B	22.1 ±0.4	14.0 ±0.3	12.7 ±0.25	54.70	25.40	1386	0.583	1
T 2504	25.0± 0.3	15.0 ±0.3	4.0 ±0.2	60.18	19.50	1173	0.407	1
T 2508	25.0 ±0.3	15.0 ±0.3	8.0 ±0.3	60.20	38.90	2343	0.813	1
T 2510	25.0 ±0.3	15.0 ±0.3	10.0 ±0.3	60.20	48.70	2932	1.018	1
T 2510B	25.0 ±0.4	15.1 ±0.3	10.0 ±0.3	60.40	48.30	2914	1.004	1
T 2512	25.0 ±0.3	15.0 ±0.3	12.0 ±0.15	60.20	58.50	3521	1.222	1
T 2512R	25.0 ±0.3	15.0 ±0.3	12.0 ±0.3	60.20	58.70	3530	1.230	2
T 2513	25.0 ±0.3	15.0 ±0.3	12.5 ±0.3	60.20	60.90	3668	1.273	1
T 2513B	25.0 ±0.4	15.1 ±0.3	13.0 ±0.3	60.20	61.20	3680	1.280	1
T 2515	25.0 ±0.3	15.0 ±0.3	15.0 ±0.3	60.18	73.39	4400	1.530	1
T 2913	28.5 ±0.5	18.5 ±0.5	13.00 ±0.6	71.58	63.79	4566	1.120	1
T 2915	28.5 ±0.5	18.5 ±0.5	15.0 ±0.6	71.60	73.60	5271	1.293	1
T 2915B	29.0 ±0.5	19.0 ±0.5	15.0 ±0.6	73.20	73.70	5393	1.265	1
T 2915K	29.0 ±0.3	19.2 ±0.2	15.0 ±0.3	73.60	72.30	5319	1.234	1
T 2915T	29.5 ±0.5	18.5 ±0.5	15.0 ±0.6	72.73	78.44	5710	1.360	1
T 3106	31.0 ±0.5	20.0 ±0.5	6.0 ±0.2	77.60	32.48	2520	0.530	1
T 3113B	31.0 ±0.5	19.0 ±0.4	13.0 ±0.3	75.50	76.30	5756	1.270	1
T 3115	31.0 ±0.5	20.0 ±0.5	15.0 ±0.4	77.60	81.00	6284	1.312	1
T 3414	34.0 ±0.5	20.5 ±0.5	14.0 ±0.3	82.10	92.30	7570	1.410	1
T 3710	36.5 ±0.6	23.0 ±0.6	10.0 +0.6	90.22	67.10	6054	0.935	2
T 3715	36.5 ±0.6	23.0 ±0.6	15.4 +0.6 -0.3	90.20	102.90	9282	1.434	2
T 3813	38.1 ±0.5	19.0 ±0.5	12.7 ±0.4	82.80	116.30	9635	1.765	1
T 3814	38.1 ±0.5	19.0 ±0.5	13.7 ±0.4	82.84	125.68	10410	1.910	1
T 3816	38.1 ±0.5	19.0 ±0.5	16.0 ±0.4	82.80	146.60	12143	2.224	1
T 4010	40.0 ±0.6	24.0 ±0.4	10.0 ±0.3	96.30	78.10	7518	1.019	2
T 4016	40.0 ±0.6	24.0 ±0.4	16.0 ±0.3	96.30	125.00	12040	1.632	2
T 4218	41.8 ±1.0	26.2 ±0.6	18.0 ±0.4	103.03	136.66	14080	1.667	2
T 4416	44.6 ±0.5	20.0 ±0.4	15.9 ±0.3	91.40	185.20	16921	2.548	1
T 4515	44.45 ±0.5	30.0 ±0.4	15.0 ±0.3	114.00	106.80	12171	1.178	2

Model	Dimension and Parameter							Fig
	A	B	C	L ₀ (mm)	A ₀ (mm ²)	V ₀ (mm ³)	C	
T 4715	47.0 ±0.8	27.0 ±0.5	15.0 +0.35 -0.65	110.50	146.20	16160	1.660	1
T 4815	48.0 ±0.5	20.0 +0.8 0	15.0 ±0.5	119.00	129.50	15409	1.368	1
T 4916	49.07 ±0.6	31.8 ±0.6	15.88 ±0.6	123.10	134.80	16596	1.376	2
T 4916	49.07 ±0.6	31.80 ±0.6	15.88 ±0.6	123.10	117.90	14515	1.203	2
T 4919	49.07 ±0.6	31.8 ±0.6	19.05 ±0.6	123.10	161.70	19914	1.651	2
T 4910	49.07 ±0.6	31.80 ±0.6	10.0 ±0.6	123.14	144.80	17800	1.480	2
T 5020	50.0 0 -1.2	25.0 +1.0 0	20.0 +1.2 0	109.50	237.20	25973	2.723	1
T 5114	51.5 ±0.6	31.5 ±0.5	13.5 ±0.6	125.30	132.10	16548	1.326	2
T 5116	51.5 ±0.6	31.5 ±0.5	16.0 ±0.6	125.30	141.00	17700	1.410	2
T 5119	51.5 ±0.6	31.5 ±0.5	19.0 ±0.6	125.30	186.20	23330	1.870	2
T 5125	51.5 ±0.6	31.5 ±0.5	24.5 ±0.5	125.30	239.90	30054	2.407	1
T 5625	56.0 ±1.0	36.0 ±0.7	25.0 ±0.5	139.92	245.67	34373	2.207	1
T 6018	60.0 ±0.8	40.0 ±0.5	18.0 ±0.5	152.90	177.30	27110	1.460	1
T 6020	60.0 ±0.8	36.0 ±0.7	20.0 ±0.5	144.40	234.60	33889	2.042	1
T 6815	67.6 ±1.0	44.0 ±0.8	15.0 ±0.5	170.03	174.09	29610	1.287	1
T 7822	78.0 ±0.8	50.5 ±0.8	22.0 ±0.8	195.60	297.60	58212	1.912	1
T 7840	78.0 ±0.8	50.5 ±0.8	40.0 ±0.8	195.63	541.21	105875	3.470	1
T 8625	85.2 ±0.8	55.4 ±0.6	25.0 ±0.5	214.18	366.59	78516	2.151	1
T 107	107.5 ±2.0	64.5 ±2.0	25.0 -0.4	258.77	521.55	134963	2.533	1
T 140	140.0 ±2.5	106.0 ±2.5	25.0 ±1.0	381.48	421.72	160877	1.390	1

Inductance,AL(nH)

Model	Materials								
	HM1	HM2A	HM3A	HM4A	HM5A	HM6A	PM5	PM7	PM12
T 0803B	1750 ³⁾	1800 ¹⁾	3550 ³⁾						
T 1004	1440 ¹⁾	2250 ¹⁾						990 ¹⁾	
T 12.7							2400 ³⁾		
T 1305					2600 ¹⁾			1200 ¹⁾	
T 1305D					4100 ¹⁾				
T 1305T		3410 ¹⁾			4100 ¹⁾				
T 1306T			4050 ¹⁾		6952 ⁴⁾				
T 1308					5350 ³⁾		1800 ¹⁾		
T 1407B		4290 ¹⁾	5460 ²⁾		7800 ²⁾				
T 1407H					7800 ²⁾				
T 1604					3980 ³⁾	4433 ²⁾			
T 1607		3760 ⁵⁾		6960 ⁵⁾					
T 1805							1300 ¹⁾		
T 1808B			4550 ¹⁾		6500 ¹⁾				
T 1906		2500 ³⁾	3330 ³⁾		4600 ¹⁾				
T 1906B		2960 ²⁾							
T 1910									
T 1911		4560 ¹⁾	6780 ⁵⁾		9180 ⁵⁾				
T 2007B								2185 ¹⁾	
T 2008		4510 ²⁾	5720 ¹⁾		9600 ⁴⁾				
T 2206B		3200 ¹⁾	4080 ¹⁾						
T 2208B		3980 ¹⁾	5040 ¹⁾						
T 2210B					8990 ¹⁾				
T 2213		6710 ¹⁾	8470 ²⁾		12100 ¹⁾				
T 2213B		6380 ¹⁾			11600 ¹⁾				
T 2504					4200 ⁵⁾	4853 ²⁾			
T 2508					8130 ⁴⁾				
T 2510			7140 ¹⁾						
T 2510B			7140 ¹⁾						
T 2512		7180 ⁵⁾	8580 ²⁾		11920 ⁵⁾				
T 2512R		6000 ⁸⁾			11900 ¹⁾				
T 2513			10930 ³⁾		12800 ¹⁾				
T 2513B					12800 ¹⁾				
T 2515							12800 ³⁾		

T 2913									
T 2915		6870 ¹⁾	8750 ¹⁾				2750 ¹⁾		
T 2915B		6900 ¹⁾			12700 ¹⁾				
T 2915K		6760 ³⁾	10500 ³⁾						
T 2915T							2990 ¹⁾		
T 3105T					6750 ¹⁰⁾				
T 3106					5260 ⁷⁾				
T 3113B			8900 ⁴⁾		12000 ¹⁾				
T 3115		7310 ⁵⁾	9200 ²⁾		13550 ⁵⁾				
T 3414			9900 ¹⁾						
T 3710							1450 ¹⁾		
T 3715		7300 ¹⁾	9300 ¹⁾				2930 ¹⁾	3190 ¹⁾	
T 3813	6200 ¹⁾	9740 ³⁾	12400 ¹⁾						
T 3814			13300 ¹⁾						
T 3816		12200 ³⁾							
T 4010			7140 ¹⁾						
T 4016							3190 ¹⁾	3480 ¹⁾	
T 4218									4200 ⁴⁾
T 4416							5150 ¹⁾		
T 4515							2350 ¹⁾	2570 ¹⁾	
T 4715		9150 ⁴⁾	11620 ¹⁾				3650 ¹⁾		
T 4815		7540 ¹⁾	9800 ¹⁾						
T 4916							2900 ¹⁾		
T 4916			7140 ¹⁾						
T 4919			10300 ¹⁾				3260 ¹⁾	3550 ¹⁾	
T 4910							1340 ¹¹⁾		
T 5020		14270 ³⁾							
T 5114		6220 ¹⁾					2480 ¹⁾		
T 5116			11000 ¹⁾						
T 5119							650 ¹¹⁾		
T 5125			16700 ¹⁾		25000 ³⁾				
T 5625					25000 ³⁾				
T 6018		8030 ⁸⁾							
T 6020		10000 ³⁾					4480 ¹⁾		
T 6815					12871 ²⁾				
T 7822							4200 ¹⁾		

T 7840					29000 ¹⁴⁾				
T 8625			11200 ¹⁵⁾		15000 ⁷⁾				
T 107						18500 ¹⁰⁾			
T 140		6500 ¹⁰⁾	6152 ¹⁰⁾			10680 ¹⁰⁾			

Note:1) 10kHz, 0.1V

2) 1kHz, 0.1V

3) 1kHz, 1V

4) 10kHz, 0.5V (20Ts)

5) 16kHz, 1V

6) 1kHz, 0.5V

7) 100kHz, 1V

8) 100kHz, 0.5V

9) 160kHz, 0.5V

10) 10kHz, 1V

13) 10kHz, 30mV

14) 10kHz, 10mA

15) 10kHz, 0.5V

* Tolerance : $\pm 25\%$ (except for HM5A), $\pm 30\%$ (only HM5A)