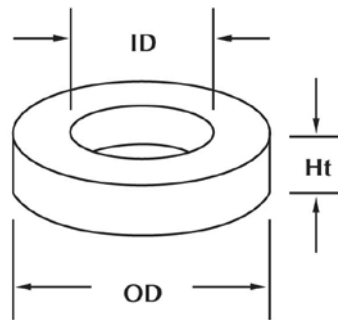


## 1. General material properties

Material Mix no.	Magnetic Permeability ( $\mu$ i)	Temperature Stability (+ppm / °C)	Resonant Circuits Frequency Band (MHz)	$A_L$ tolerance	Color Code
-0	1 (non magnetic)	0	50 - 350	N/A	Tan
-1	20	280	0.15 - 3	$\pm 10\%$	Blue/Clear
-2	10	95	0.25 - 20	$\pm 5\%$	Red/Clear
-3	35	370	0.02 - 1	$\pm 10\%$	Gray/Clear
-6	8	35	3 - 40	$\pm 5\%$	Yellow/Clear
-7	9	30	1 - 25	$\pm 5\%$	White/Clear
-10	6	150	15 - 100	$\pm 5\%$	Black/Clear
-12	<u>OBSOLETE TYPE, SEE NEW MATERIAL MIX -17</u>				Green/White
-17	4	50	20 - 200	$\pm 5\%$	Blue/Yellow

## 2. Dimensions



Part number	OD (mm / inch)	ID (mm / inch)	Ht (mm / inch)	Magnetic dimensions		
				$\ell$ (cm)	A (cm <sup>2</sup> )	V (cm <sup>3</sup> )
T12-*	3.18 / 0.125	1.57 / 0.062	1.27 / 0.050	0.75	0.01	0.0077
T20-*	5.08 / 0.200	2.24 / 0.088	1.78 / 0.070	1.15	0.023	0.026
T25-*	6.48 / 0.255	3.05 / 0.120	2.44 / 0.096	1.5	0.037	0.055
T30-*	7.80 / 0.307	3.84 / 0.151	3.25 / 0.128	1.84	0.061	0.11
T37-*	9.53 / 0.375	5.21 / 0.205	3.25 / 0.128	2.31	0.064	0.147
T44-*	11.2 / 0.440	5.82 / 0.229	4.04 / 0.159	2.68	0.099	0.266
T50-*	12.7 / 0.500	7.70 / 0.303	4.83 / 0.190	3.19	0.112	0.358
T68-*	17.5 / 0.690	9.40 / 0.370	4.83 / 0.190	4.23	0.179	0.759
T80-*	20.2 / 0.795	12.6 / 0.695	6.35 / 0.250	5.14	0.231	1.19
T94-*	23.9 / 0.942	14.2 / 0.560	7.92 / 0.312	5.97	0.362	2.16
T106-*	26.9 / 1.060	14.5 / 0.570	11.1 / 0.437	6.49	0.659	4.28
T130-*	33.0 / 1.300	19.8 / 0.780	11.1 / 0.437	8.28	0.698	5.78
T157-*	39.9 / 1.570	24.1 / 0.950	14.5 / 0.570	10.1	1.06	10.7
T184-*	46.7 / 1.840	24.1 / 0.950	18.0 / 0.710	11.2	1.88	21.0
T200-*	50.8 / 2.000	31.8 / 1.250	14.0 / 0.550	13.0	1.27	16.4
T200-2B	50.8 / 2.000	31.8 / 1.250	25.4 / 1.000	13.0	2.32	30.0
T225-2	57.2 / 2.250	35.6 / 1.400	14.0 / 0.550	14.6	1.42	20.7
T300-2	77.2 / 3.040	49.0 / 1.930	12.7 / 0.500	19.8	1.68	33.4
T400-2	102 / 4.000	57.2 / 2.250	16.5 / 0.650	25.0	3.46	86.4

## 3. Inductance rating

Material Mix	-0	-1	-2	-3	-6	-7	-10	-17
Part number	(μH for 100 turns)							
T12-					17.0			
T20-			25.0		22.0			
T25-			34.0		27.0		19.0	12.0
T30-	6.0		43.0	140.0	36.0		25.0	16.0
T37-	5.0		40.0	120.0	30.0	32.0	26.0	15.0
T44-	6.5		52.0	180.0	42.0	43.0	33.0	18.5
T50-	6.4	100.0	49.0	175.0	40.0		31.0	18.0
T68-	7.5	115.0	57.0	195.0	47.0		32.0	21.0
T80-	8.5	115.0	55.0	180.0	45.0		32.0	22.0
T94-	10.6		84.0	248.0	70.0		58.0	29.0
T106-	19.0		135.0	450.0	116.0			51.0
T130-	15.0		110.0		96.0			40.0
T157-	19.0		140.0		115.0			53.0
T184-			240.0		195.0			
T200-			120.0		100.0			
T200-2B			218.0					
T225-2			120.0					
T300-2			114.0					
T400-2			180.0					

## 4. Single layer winding table

Wire size (AWG)	40	38	36	34	32	30	28	26	24	22	20	18	16	14	12	10		
Wire size Ø (mm)	.080	.100	.127	.160	.202	.255	.321	.405	.511	.644	.812	1.02	1.29	1.63	2.05	2.59		
Resistivity (mΩ/cm)	35.4	21.3	13.6	8.57	5.32	3.40	2.13	1.34	.842	.530	.330	.210	.132	.083	.052	.033		
Part number	MTL cm/turn	Surface area (cm <sup>2</sup> )	NUMBER OF TURNS															
T12	.564	.445	43	33	26	20	15	11	8	5	3	1						
T20	.956	1.16	57	44	34	27	20	15	11	8	5	3	2	1				
T25	1.19	1.88	84	65	52	41	31	24	18	14	10	7	5	3	1			
T30	1.44	2.79	110	86	69	54	42	33	25	20	15	11	7	5	3	1		
T37	1.53	3.77	156	122	98	78	60	48	37	29	22	17	12	9	6	4	2	1
T44	1.84	5.23	177	138	111	88	69	55	43	34	26	20	15	11	7	5	3	1
T50	2.01	6.86	239	187	151	121	94	76	59	47	37	28	22	16	12	8	6	3
T68	2.47	11.2	296	232	187	150	117	94	74	59	46	36	28	21	16	12	8	5
T80	2.80	15.5	402	316	255	204	161	129	103	82	64	51	39	30	23	17	13	9
T94	3.44	22.0	458	359	290	233	183	148	117	94	74	58	45	35	27	21	15	11
T106	4.49	31.0	462	362	293	235	185	149	118	95	74	59	46	36	27	21	15	11
T130	4.75	42.2	640	503	406	326	257	208	165	133	105	83	65	51	40	31	23	17
T157	5.89	63.2	784	616	499	401	316	256	204	164	129	103	81	64	50	39	30	23
T184	7.54	89.2	780	613	496	398	314	254	202	163	129	102	81	63	50	38	29	22
T200	6.50	90.9	1035	814	658	529	418	338	270	217	172	137	108	86	67	53	41	31
T200B	8.78	120	1035	814	658	529	418	338	270	217	172	137	108	86	67	53	41	31
T225	6.93	109	1167	917	742	597	471	382	305	245	195	155	123	97	76	60	46	36
T300	7.95	173	1612	1268	1027	826	653	529	422	341	271	216	171	136	108	85	66	52
T400	11.1	301	1884	1482	1200	966	763	619	494	399	317	254	201	160	126	100	78	61