

# IRON POWDER TOROIDAL CORES (For Resonant Circuits)

MATERIAL 0		Permeabilty 1		Freq. Range 100 MHz - 300 MHz			Color - Tan	
Core number	O.D. (inches)	I.D. (inches)	Hgt. (inches)	$l_e$ (cm)	$A_e$ (cm) <sup>2</sup>	$V_e$ (cm) <sup>3</sup>	$A_L$ Value $\mu$ h/100 turns	
T-12-0	.125	.062	.050	.74	.010	.007	3.0	
T-16-0	.160	.078	.060	.95	.016	.015	3.0	
T-20-0	.200	.088	.070	1.15	.025	.029	3.5	
T-25-0	.255	.120	.096	1.50	.042	.063	4.5	
T-30-0	.307	.151	.128	1.83	.065	.119	6.0	
T-37-0	.375	.205	.128	2.32	.070	.162	4.9	
T-44-0	.440	.229	.159	2.67	.107	.286	6.5	
T-50-0	.500	.303	.190	3.03	.121	.367	6.4	
T-68-0	.690	.370	.190	4.24	.196	.831	7.5	
T-80-0	.795	.495	.250	5.15	.242	1.246	8.5	
T-94-0	.942	.560	.312	6.00	.385	2.310	10.6	
T-106-0	1.060	.570	.437	6.50	.690	4.485	19.0	
T-130-0	1.300	.780	.437	8.29	.730	6.052	15.0	

Note: Due to the nature of the '0' material, the inductance resulting from the use of the given  $A_L$  value may vary greatly depending upon the winding technique. This may cause discrepancy between calculated and measured inductance.

MATERIAL 1		Permeabilty 20		Freq. Range 0.5 MHz - 5 MHz			Color - Blue	
Core number	O.D. (inches)	I.D. (inches)	Hgt. (inches)	$l_e$ (cm)	$A_e$ (cm) <sup>2</sup>	$V_e$ (cm) <sup>3</sup>	$A_L$ Value $\mu$ h/100 turns	
T-12-1	.125	.062	.050	.74	.010	.007	48	
T-16-1	.160	.078	.060	.95	.016	.015	44	
T-20-1	.200	.088	.070	1.15	.025	.029	52	
T-25-1	.255	.120	.096	1.50	.042	.063	70	
T-30-1	.307	.151	.128	1.83	.065	.119	85	
T-37-1	.375	.205	.128	2.32	.070	.162	80	
T-44-1	.440	.229	.159	2.67	.107	.286	105	
T-50-1	.500	.303	.190	3.03	.121	.367	100	
T-68-1	.690	.370	.190	4.24	.196	.831	115	
T-80-1	.795	.495	.250	5.15	.242	1.246	115	
T-94-1	.942	.560	.312	6.00	.385	2.310	160	
T-106-1	1.060	.570	.437	6.50	.690	4.485	325	
T-130-1	1.300	.780	.437	8.29	.730	6.052	200	
T-157-1	1.570	.950	.570	10.05	1.140	11.457	320	
T-184-1	1.840	.950	.710	11.12	2.040	22.685	500	
T-200-1	2.000	1.250	.550	12.97	1.330	17.250	250	

Note: Most cores can be very useful well below the lower frequency limit shown above.