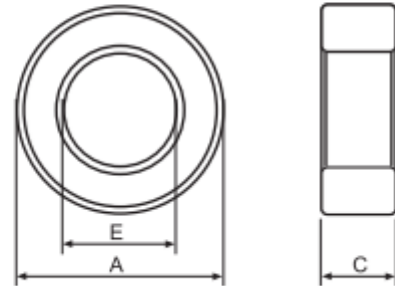
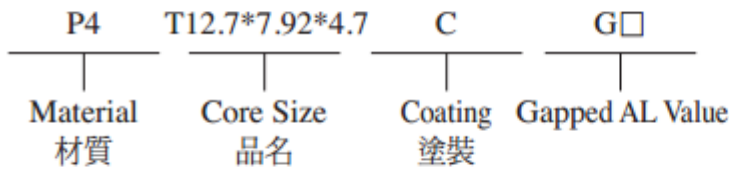


# Type : T Cores

Ordering Code:

Shape:



C : Epoxy Coating of Halogen-Free    UC : Epoxy Coating of UL & Halogen  
 HP : Parylene Coating of Halogen-Free    P : Parylene Coating of Halogen

## ■ DIMENSIONS AND EFFECTIVE PARAMETERS

CORES	DIMENSIONS (mm)			EFFECTIVE PARAMETERS				
	EPOXY COATING DIMENSIONS (mm)			C <sub>1</sub> (mm <sup>-1</sup> )	Le(mm)	Ae(mm <sup>2</sup> )	Ve(mm <sup>3</sup> )	Wt(g/set)
	A	E	C					
T12.7x7.92x4.7	12.70 ± 0.40	7.92 ± 0.30	4.70 ± 0.30	2.98	32.08	10.76	345.23	1.61
	13.70max	7.02min	5.60max					
T12.7x7.92x4.9	12.70 ± 0.40	7.92 ± 0.30	4.90 ± 0.30	2.86	32.08	11.22	359.92	1.70
	13.70max	7.02min	5.80max					
T12.7x7.92x5.2	12.70 ± 0.40	7.92 ± 0.30	5.20 ± 0.30	2.69	32.08	11.91	381.96	1.80
	13.70max	7.02min	6.10max					
T12.7x7.92x6.35	12.70 ± 0.40	7.92 ± 0.30	6.35 ± 0.30	2.22	32.08	14.43	462.76	2.33
	13.70max	7.02min	7.25max					
T12.7x7.92x7	12.70 ± 0.40	7.92 ± 0.30	7.00 ± 0.30	2.00	32.08	16.03	514.17	2.40
	13.70max	7.02min	7.90max					
T12.7x8.12x5.08	12.70 ± 0.40	8.12 ± 0.30	5.08 ± 0.30	2.80	32.68	11.63	380.25	1.82
	13.70max	7.22min	5.98max					
T12.85x7.35x5	12.85 ± 0.40	7.35 ± 0.30	5.00 ± 0.30	2.31	31.73	13.75	436.29	2.14
	13.85max	6.45min	5.90max					
T13.21x7.37x3.96	13.21 ± 0.40	7.37 ± 0.30	3.96 ± 0.30	2.80	32.33	11.56	373.80	1.81
	14.21max	6.47min	4.86max					
T13.3x7.1x12.7	13.30 ± 0.40	7.10 ± 0.40	12.70 ± 0.30	0.79	30.03	38.10	1144.33	6.17
	14.30max	6.10min	13.60max					
T13.3x8.3x5	13.30 ± 0.30	8.30 ± 0.30	5.00 ± 0.30	2.71	33.93	12.50	424.12	2.09
	14.20max	7.40min	5.90max					
T14x7x7	14.00 ± 0.40	7.00 ± 0.30	7.00 ± 0.30	1.35	32.99	24.50	808.17	3.88
	15.00max	6.10min	7.90max					
T14x7.5x7	14.00 ± 0.40	7.50 ± 0.30	7.00 ± 0.30	1.48	33.77	22.75	768.32	3.69
	15.00max	6.60min	7.90max					
T14x8x4	14.00 ± 0.40	8.00 ± 0.30	4.00 ± 0.30	2.88	34.56	12.00	414.69	1.97
	15.00max	7.10min	4.90max					
T14x8x7	14.00 ± 0.40	8.00 ± 0.30	7.00 ± 0.30	1.65	34.56	21.00	725.71	3.45
	15.00max	7.10min	7.90max					
T14x8x9	14.00 ± 0.40	8.00 ± 0.30	9.00 ± 0.30	1.28	34.56	27.00	933.05	4.48
	15.00max	7.10min	9.90max					

## ■ ELECTRICAL CHARACTERISTICS

CORES	AL ± 25% (nH/N <sup>2</sup> )						AL ± 30% (nH/N <sup>2</sup> )			
	P4	P47	P5	N42	A05	A07	A10	A102	A121	A151
T12.7x7.92x4.7	1100				2220	3110	4460	4460		
T12.7x7.92x4.9	1156				2310	3240	4630	4630	5456	
T12.7x7.92x5.2	1227			1830	2455	3437	4910	4910		
T12.7x7.92x6.35	1487			2240	2990	4190	5950	5950	7070	8840
T12.7x7.92x7	1653	1950	1290		3300	4650	6610	6610	7795	9740
T12.7x8.12x5.08					2200		4470	4470		
T12.85x7.35x5	1400				2790	3910	5580	5580	6540	8170
T13.21x7.37x3.96					2250	3150	4500	4500		
T13.3x7.1x12.7										22000
T13.3x8.3x5	1150		900		2300	3200	4600	4600	5500	6800
T14x7x7					4670	6540	9300	9300	11210	14000
T14x7.5x7					4230	5930	8400	8400	10160	12700
T14x8x4	1119		870		2240	3130	4480	4480	5240	6550
T14x8x7	1956				3920	5480	7840	7840	9170	11460
T14x8x9	2510				5040	7045	10080	10080	11790	14730

### 2. Coating Material

- (1) Toroid Size T8 and Below: clear parylene coating, breakdown voltage: 1000Vdc, coating thickness : 0.05mm max.
- (2) Toroid Size T9 and Above: green epoxy coating, breakdown voltage: 1500Vdc, coating thickness : 0.6mm max.

## Material Characteristics (1)

	Symbol	Unit	Measuring Conditions			Low Loss Materials			
			Freq.	Flux den.	Temp.	P4	P41	P42	P48
Initial Permeability	$\mu_i$		$\leq 10\text{kHz}$	0.25mT	25°C	2500 $\pm$ 25%	2400 $\pm$ 25%	1800 $\pm$ 25%	2500 $\pm$ 25%
Amplitude Permeability	$\mu_a$		25kHz	200mT	25°C	> 4500	> 4500	> 5000	> 5000
					100°C	> 4500	> 4500	> 5000	> 5000
Power Loss	Pv	KW/m <sup>3</sup>	25kHz	200mT	25°C	105	125	125	
					100°C	55	50	50	
			100kHz	200mT	25°C	700	650	750	550
					100°C	450	350	350	250
			300kHz	100mT	25°C	660	820	900	500
					100°C	430	500	500	300
			500kHz	50mT	25°C	380	400	450	250
					100°C	330	300	300	200
Saturation Flux Density	Bms	mT	10kHz	H = 1200A/m	25°C	480	495	520	515
					100°C	380	395	420	410
Remanence	Brms	mT	10kHz	H = 1200A/m	25°C	100	170	200	150
					100°C	70	70	70	60
Coercivity	Hc	A/m	10kHz	H = 1200A/m	25°C	10	11	12	13
					100°C	6	6	6	7
Hysteresis Material Constant	$\eta_B$	10 <sup>-6</sup> /mT	10kHz	1.5-3.0mT	25°C	< 1.2	< 1	< 1	< 1
Disaccommodation Factor	D <sub>r</sub>	10 <sup>-6</sup>	10kHz	< 0.25 mT	25°C	< 2	< 2	< 2	< 2
Curie Temperature	T <sub>c</sub>	°C				220	230	240	220
Resistivity	$\rho$	$\Omega\text{m}$				5.50	4.00	8.00	5.00
Density	d	g/cm <sup>3</sup>				4.80	4.85	4.90	4.90