

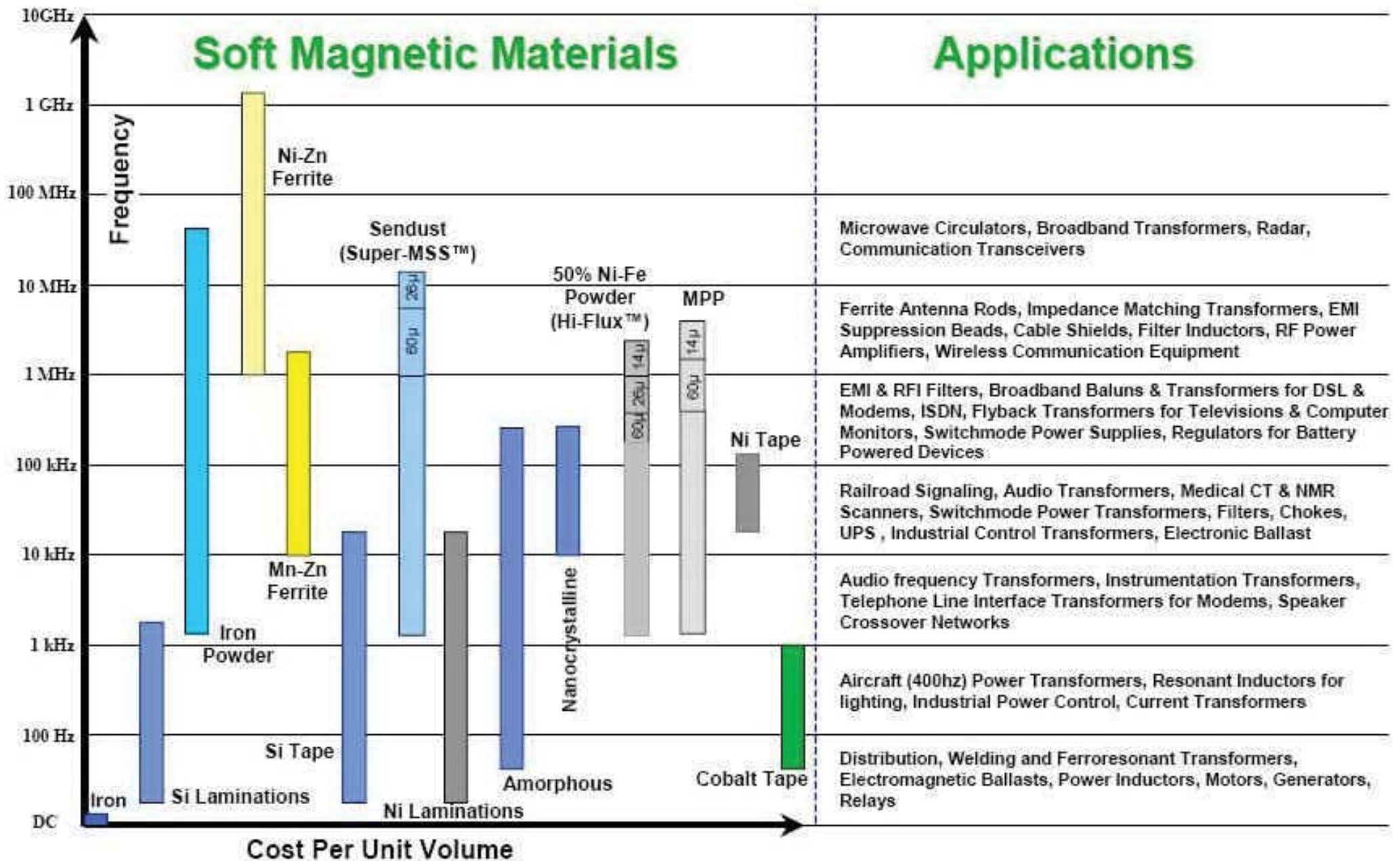
Cores



Core Types

- ✓ P=>Permalloy Cores.
- ✓ S=>Silicon Cores.
- ✓ A=>Amorphous Cores.
- ✓ M=>Mn Zn Cores.

Core Coatings : Powder Coatings
The above cores are made by T.H.



Thermal Shock TEST REPORT FOR CT101 SERIES (2500TS)

INSTRUMENT		HES-1S																	
CORE		T19*12.3*5																	
CONDITIONS		20A/8mA / RL=100Ω																	
MATERIAL		TH1J85 (Permalloy Core)					TH20JG(Sillicon Core)					TH07(Amorphous Core)							
SPEC	Sample No	5%	10%	20%	100%	120%	Sample No	5%	10%	20%	100%	120%	Sample No	5%	10%	20%	100%	120%	
	f(%)	± 0.75	± 0.50	± 0.35	± 0.20	± 0.20	f(%)	± 3	± 3	± 3	± 3	± 3	f(%)	± 0.75	± 0.50	± 0.35	± 0.20	± 0.20	
SPEC	δ(')	± 30	± 20	± 15	± 10	± 10	δ(')	---	---	---	---	---	δ(')	± 30	± 20	± 15	± 10	± 10	
-40°C																			
1#	f(%)	0.172	0.081	0.031	-0.029	-0.032	f(%)	-1.03	-1.08	-1.08	-1.09	-1.1	f(%)	0.199	0.116	0.029	-0.009	-0.005	
	δ(')	8.6	9.9	9.8	5.8	5.1	δ(')	69.2	64.1	58.6	41	38.5	δ(')	9.6	10.5	8.8	2.8	2.6	
2#	f(%)	0.134	0.064	0.011	-0.069	-0.068	f(%)	-0.32	-0.38	-0.42	-0.42	-0.42	f(%)	0.234	0.125	0.065	-0.011	-0.008	
	δ(')	14.6	14.9	14	7.1	6.9	δ(')	67.8	63.5	56.1	37.5	34.5	δ(')	7.7	10.2	9.9	3.9	3.1	
3#	f(%)	0.162	0.064	0.012	-0.077	-0.083	f(%)	-0.38	-0.4	-0.39	-0.36	-0.36	f(%)	0.208	0.113	0.048	-0.021	-0.016	
	δ(')	18.4	19.1	14.5	8.5	7.7	δ(')	64.4	60	54.6	36.8	34.6	δ(')	11.7	13.2	11.8	3.9	3.4	
-25°C																			
1#	f(%)	0.208	0.111	0.053	-0.027	-0.031	f(%)	-1	-1.04	-1.05	-1.06	-1.07	f(%)	0.198	0.117	0.043	-0.006	-0.002	
	δ(')	5.9	8.3	9.2	5.6	5	δ(')	72	67.4	60.8	41.6	38.9	δ(')	8.6	10	8.9	3.5	2.9	
2#	f(%)	0.199	0.085	0.037	-0.043	-0.044	f(%)	-0.32	-0.38	-0.39	-0.38	-0.38	f(%)	0.246	0.149	0.074	-0.014	-0.01	
	δ(')	8.1	10.5	10.7	5.8	5.2	δ(')	62.1	58.3	52.7	36.3	33.9	δ(')	6.3	9.2	9.5	3.7	3	
3#	f(%)	0.191	0.092	0.022	-0.068	-0.067	f(%)	-0.43	-0.44	-0.43	-0.39	-0.39	f(%)	0.206	0.136	0.068	-0.018	-0.015	
	δ(')	13.7	15.6	14.4	7.5	6.7	δ(')	77.5	69.9	62.3	40.5	37.8	δ(')	8.4	10.6	10.7	4.2	3.6	
25°C																			
1#	f(%)	0.373	0.163	0.047	-0.037	-0.041	f(%)	-0.93	-0.98	-0.99	-0.99	-1	f(%)	0.174	0.097	0.052	-0.007	-0.003	
	δ(')	3.3	3.4	6.4	4.4	4.1	δ(')	71.5	67.9	62.8	44.5	41.3	δ(')	8.8	10.6	9.5	3.4	3.2	
2#	f(%)	0.336	0.141	0.051	-0.023	-0.024	f(%)	-0.28	-0.39	-0.45	-0.43	-0.43	f(%)	-0.184	0.114	0.061	-0.016	-0.012	
	δ(')	6.7	1.3	4.1	3.8	3.6	δ(')	58	56.5	51.8	36.2	34.2	δ(')	9.1	11.1	10.7	4.4	3.9	
3#	f(%)	0.416	0.209	0.084	-0.017	-0.022	f(%)	-0.59	-0.59	-0.56	-0.47	-0.46	f(%)	0.189	0.098	0.058	-0.015	-0.09	
	δ(')	8.5	0.8	5.1	5.1	4.3	δ(')	73.3	72.5	67.7	42.9	39.6	δ(')	8.8	12.4	11.2	7.4	3.4	
85°C																			
1#	f(%)	0.257	0.093	0.016	-0.059	-0.068	f(%)	-0.68	-0.63	-0.6	-0.58	-0.59	f(%)	0.229	0.126	0.031	-0.037	-0.035	
	δ(')	3.3	4.3	7.2	3.7	5.4	δ(')	79.5	72.5	67.2	43.1	40.2	δ(')	7.3	11.3	11.1	6.2	6.6	
2#	f(%)	0.271	0.071	0.004	-0.049	-0.053	f(%)	-0.58	-0.55	-0.51	-0.48	-0.49	f(%)	0.222	0.134	0.065	-0.027	-0.021	
	δ(')	7.2	2.8	4.8	4.8	5.6	δ(')	73.6	67.2	60.3	38.8	36.3	δ(')	4.3	9.4	10.5	4.7	6.4	
3#	f(%)	0.308	0.134	0.059	-0.005	-0.008	f(%)	-0.7	-0.64	-0.61	-0.54	-0.53	f(%)	0.168	0.105	0.038	-0.057	-0.051	
	δ(')	14.7	2.4	1.7	3.7	5	δ(')	93.2	83.7	77.1	45.4	41.6	δ(')	12	15.1	14.6	6	7.4	

MATERIAL	TH1J85 (Permalloy Core)						TH20JG(Sillicon Core)						TH07(Amorphous Core)					
SPEC	Sample No	5%	10%	20%	100%	120%	Sample No	5%	10%	20%	100%	120%	Sample No	5%	10%	20%	100%	120%
f(%)		± 0.75	± 0.50	± 0.35	± 0.20	± 0.20	f(%)	± 3	± 3	± 3	± 3	± 3	f(%)	± 0.75	± 0.50	± 0.35	± 0.20	± 0.20
δ(')		± 30	± 20	± 15	± 10	± 10	δ(')	---	---	---	---	---	δ(')	± 30	± 20	± 15	± 10	± 10

MAX

1#	f(%)	0.373	0.163	0.053	-0.027	-0.031	f(%)	-0.682	-0.629	-0.602	-0.579	-0.585	f(%)	0.229	0.126	0.052	-0.006	-0.002
	δ(')	8.6	9.9	9.8	5.8	5.4	δ(')	79.5	72.5	67.2	44.5	41.3	δ(')	9.6	11.3	11.1	6.2	6.6
2#	f(%)	0.336	0.141	0.051	-0.023	-0.024	f(%)	-0.281	-0.375	-0.391	-0.377	-0.383	f(%)	0.246	0.149	0.074	-0.011	-0.008
	δ(')	14.6	14.9	14	7.1	6.9	δ(')	73.6	67.2	60.3	38.8	36.3	δ(')	9.1	11.1	10.7	4.7	6.4
3#	f(%)	0.416	0.209	0.084	-0.005	-0.008	f(%)	-0.381	-0.401	-0.392	-0.359	-0.362	f(%)	0.208	0.136	0.068	-0.015	-0.015
	δ(')	18.4	19.1	14.5	8.5	7.7	δ(')	93.2	83.7	77.1	45.4	41.6	δ(')	12	15.1	14.6	7.4	7.4

MIN

1#	f(%)	0.172	0.081	0.016	-0.059	-0.068	f(%)	-1.031	-1.078	-1.082	-1.091	-1.101	f(%)	0.174	0.097	0.029	-0.037	-0.035
	δ(')	3.3	3.4	6.4	3.7	4.1	δ(')	69.2	64.1	58.6	41	38.5	δ(')	7.3	10	8.8	2.8	2.6
2#	f(%)	0.134	0.064	0.004	-0.069	-0.068	f(%)	-0.582	-0.553	-0.511	-0.483	-0.486	f(%)	-0.184	0.114	0.061	-0.027	-0.021
	δ(')	6.7	1.3	4.1	3.8	3.6	δ(')	58	56.5	51.8	36.2	33.9	δ(')	4.3	9.2	9.5	3.7	3
3#	f(%)	0.162	0.064	0.012	-0.077	-0.083	f(%)	-0.704	-0.637	-0.611	-0.535	-0.532	f(%)	0.168	0.098	0.038	-0.057	-0.09
	δ(')	8.5	0.8	1.7	3.7	4.3	δ(')	64.4	60	54.6	36.8	34.6	δ(')	8.4	10.6	10.7	3.9	3.4

Variences between Max. and Min.

1#	f(%)	0.201	0.082	0.037	0.032	0.037	f(%)	0.349	0.449	0.48	0.512	0.516	f(%)	0.055	0.029	0.023	0.031	0.033
	δ(')	5.3	6.5	3.4	2.1	1.3	δ(')	10.3	8.4	8.6	3.5	2.8	δ(')	2.3	1.3	2.3	3.4	4
2#	f(%)	0.202	0.077	0.047	0.046	0.044	f(%)	0.301	0.178	0.12	0.106	0.103	f(%)	0.43	0.035	0.013	0.016	0.013
	δ(')	7.9	13.6	9.9	3.3	3.3	δ(')	15.6	10.7	8.5	2.6	2.4	δ(')	4.8	1.9	1.2	1	3.4
3#	f(%)	0.254	0.145	0.072	0.072	0.075	f(%)	0.323	0.236	0.219	0.176	0.17	f(%)	0.04	0.038	0.03	0.042	0.075
	δ(')	9.9	18.3	12.8	4.8	3.4	δ(')	28.8	23.7	22.5	8.6	7	δ(')	3.6	4.5	3.9	3.5	4

