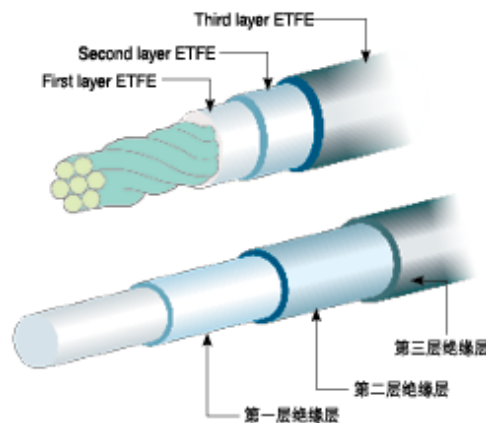


VERY HIGH DIELECTRIC STRENGTH AND BREAKDOWN VOLTAGE

THL-B series

THL-B series, thermal class at 130°C, is a unique product for high frequency transformers. Three layer extruded coatings of high performance polymer resins gives excellent dielectric properties to this type of winding wires. Unlike enameled wires, three layers of insulation are extruded over the copper conductor with automated manufacturing process, to ensure perfect central position of conductor.

The conventional enameled wire winding coils requires insulation between the primary and secondary coils by means of barrier tape or interlayer tape to isolate primary and secondary windings. Since three layers coating is having very high dielectric strength, it has very less creepage factor. This positive feature of THL serves to downsize switching transformers and promises high production efficiency and cost reduction. Depending on the design, the transformer size can be reduced up to 40% and weight up to 60% as compared to transformers made of enameled wires.



Advantages

- Greatly reduces size and weight of transformer
- No need of interlayer insulations, tapes, barriers etc.
- Very high dielectric strength withstands 7000V AC for 1 minute
- Breakdown voltages above 7 KV
- Excellent mechanical strength, ideal for automated winding
- Auto controlled manufacturing process with fault detectors throughout the production process
- Highly reliable for transformer winding
- In addition to the reduction in size and economy in material cost of the transformer, THL has an advantage of improving its performance by reducing the distance between the coils

Applications

- Transformers
- Switching power supplies
- Motors
- Relays
- Inductors
- Electromagnets

TECHNICAL DATA

THL-B series

Diameter (mm)	Tolerance (mm)	Min. Overall Diameter (mm)	Max. Overall Diameter (mm)	Max. Conductor Resistance (Ω /km 20°C)
0.089	± 0.008	0.281	0.306	2946
0.102	± 0.008	0.294	0.319	2254
0.127	± 0.008	0.319	0.344	1443
0.142	± 0.008	0.334	0.359	1151
0.16	± 0.008	0.352	0.377	908
0.20	± 0.008	0.392	0.417	607.6
0.25	± 0.008	0.442	0.467	382.5
0.26	± 0.01	0.452	0.477	358.4
0.28	± 0.01	0.472	0.497	307.3
0.30	± 0.01	0.495	0.520	262.9
0.32	± 0.01	0.515	0.540	227.0
0.35	± 0.01	0.545	0.570	191.2

0.37	±0.01	0.565	0.590	170.6
0.40	±0.01	0.600	0.625	143.0
0.45	±0.01	0.650	0.675	112.0
0.50	±0.01	0.700	0.725	91.43
0.55	±0.02	0.750	0.775	78.15
0.60	±0.02	0.800	0.825	65.26
0.65	±0.02	0.850	0.875	55.31
0.70	±0.02	0.895	0.925	47.47
0.75	±0.02	0.945	0.975	41.19
0.80	±0.02	0.980	1.00	36.08
0.85	±0.02	1.050	1.08	31.87
0.90	±0.02	1.100	1.13	28.35
0.95	±0.02	1.150	1.18	25.38
1.00	±0.03	1.170	1.20	23.33
