



LAMINATES FOR TRANSFORMERS

SHIELDING & WINDING

PPI 1091

UL

- Copper / Polyester double sided laminate
- Heat class B

PPI 1091-2

UL

- Fringed version of PPI 1091

PPI 1095

- Copper / Polyester laminate
- Copper foil completely wrapped with PET insulation

PPI 1096

UL

- Copper / Polyester laminate
- Copper foil partially wrapped with PET insulation

OTHER FORMS:

1. Similar to PPI 1091 and 1091-2 but with two or more parallel strips of copper

2. Similar to PPI 1091, 1091-2, 1095, 1096 but with a wide range of film thicknesses and other insulating materials such as Nomex and Polyimide Film for classes F and H insulation

3. Metal foils with insulation laminated on one or both sides

4. Special shapes and die-cut pieces of copper insulated in the same way as PPI 1091, 1091-2, 1095 and 1096 are available in a range of copper thicknesses up to 0,150mm to customer design and specification

PPI 6591

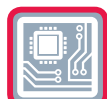
- Copper / Nomex single sided laminate
- Heat class H

PPI 6991

- Copper / PEN single sided laminate
- Heat class F

PPI 7091

- Copper / polyimide single sided laminate
- Heat class H



PPI 1091

double sided laminate tape

a special laminate tape based on a soft, annealed copper foil with polyester (polyethylene terephthalate) film. This heat class B (up to 130°C/ 266°F) laminate tape can be supplied in a multitude of film and copper foil thicknesses and width constructions.

PPI 1095

laminate tape

a special laminate tape based on a combination of soft, annealed copper foil with polyester film. The copper foil is completely wrapped with the polyester insulation with an average overlap of 2 mm. Where an earth contact is required, it is possible to solder through the polyester insulating layer. This heat class B (up to 130°C/ 266°F) laminate tape can be supplied in a multitude of film and copper foil thicknesses and width constructions.

PPI 1096

laminate tape

a special laminate tape based on a combination of soft, annealed copper foil with polyester film. The copper foil is partially wrapped with the polyester insulation leaving a minimum 1 mm solder gap on one side. This heat class B (up to 130°C/ 266°F) laminate tape can be supplied in a multitude of film and copper foil thicknesses and width constructions.

Application:

Copper foil/ polyester film laminates have two major application areas:

Static shields:

Acting as an electromagnetic/ electrostatic shield, the laminate is applied between the primary and secondary winding and also earthed. The shield thus prevents capacitive coupling between the primary and secondary winding.

Direct winding:

Copper foil laminates are also used as replacements for copper wire in primary and secondary windings. Foil conductors have the advantage of having a greater surface area for a given cross sectional area, when compared to wire conductors. Since most of the current flowing through a conductor is on the surface (i.e. the so called "skin effect") and the limitations of the skin effect are most noticeable as frequencies increase, this has resulted in major use of foil laminate tapes in the production of high frequency transformers.

PPI 6591

single sided laminate tape

a special laminate tape based on a combination of soft, annealed copper foil with Nomex® aramid paper. This heat class H (up to 180°C/ 356°F) laminate tape can be supplied in a multitude of Nomex® and copper foil thicknesses and width constructions.

PPI 6991

single sided laminate tape

a special laminate tape based on a combination of soft, annealed copper foil with PEN (polyethylene naphthalate) film. This heat class F (up to 155°C/ 311°F) laminate tape can be supplied in a multitude of film and copper foil thicknesses and width constructions.

PPI 7091

single sided laminate tape

a special laminate tape based on a combination of soft, annealed copper foil with polyimide film. This heat class H (up to 180°C/ 356°F) laminate tape can be supplied in a multitude of film and copper foil thicknesses and width constructions.