

## TECHNICAL DATA

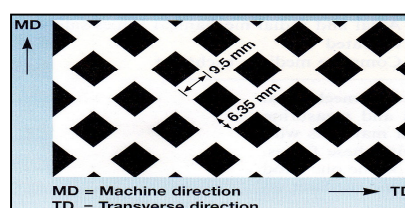
### PAR DPP - Diamond Dotted Presspaper

#### DESCRIPTION

PAR DPP consists of PAR PSP-3055 RPT Transformer Presspaper coated on both sides with a partial pattern of epoxy resin. The re-meltable low molecular epoxy resin is cured to a 'B-stage' and will become sticky again at temperatures between 110 - 130°C. The thickness of the epoxy resin coating is independent of the presspaper thickness and has a value of 0.02mm on each side with a tolerance of  $\pm 0.01$ mm.



PAR DPP



PAR DPP Epoxy Resin Pattern Dimensions

#### APPLICATIONS

PAR DPP is well proven as layer insulation in oil filled transformers. The partial resin coating mechanically strengthens the coil and the transformer presspaper produces, after impregnation, high electrical characteristics. The resin coating is also very stable at elevated temperatures and in conjunction with transformer & silicone oil.

#### CURING CONDITIONS

Temperature °C	110	120	130
Curing time, hours	10	5	2

\*These temperatures must exist throughout all of the insulation

#### SUPPLY FORMATS

DPP Type	Nominal Thickness* mm	Area Weight g/m <sup>2</sup>	Area Utilisation m <sup>2</sup> /Kg	Standard Core mm	Standard Widths** mm	Resin Thickness mm	Presspaper Density g/m <sup>3</sup>
DPP 0.06	0.08 ± 12%	70 ± 12%	14.30	70	1240	0.02	1.1
DPP 0.075	0.095 ± 10%	85 ± 12%	11.80	70	1240	0.02	1.1
DPP 0.125	0.145 ± 10%	140 ± 12%	7.10	70	1240/1600	0.02	1.1
DPP 0.175	0.195 ± 10%	195 ± 12%	5.10	70	1240/1600	0.02	1.1
DPP 0.20	0.22 ± 10%	225 ± 12%	4.40	70	1240/1600	0.02	1.1
DPP 0.25	0.27 ± 10%	280 ± 12%	3.60	70	1240/1600	0.02	1.1
DPP 0.30	0.32 ± 10%	335 ± 12%	3.00	70	1240/1600	0.02	1.1
DPP 0.38	0.40 ± 10%	420 ± 12%	2.40	70	1240/1600	0.02	1.1
DPP 0.40	0.42 ± 10%	445 ± 12%	2.20	70	1240/1600	0.02	1.1
DPP 0.50	0.52 ± 10%	555 ± 12%	1.80	70	1240/1600	0.02	1.1

\* Presspaper + resin coating (Total thickness)

\*\*Slit tapes down to 10mm wide also available on request

**PAR DPP - Diamond Dotted Presspaper**

**CHARACTERISTICS**

DPP Type	Tensile Shear Strength (100°C) N/mm <sup>2</sup>	Tensile Strength Longitudinal N/mm <sup>2</sup>	Tensile Strength Transverse N/mm <sup>2</sup>	Breakdown Voltage Dry kV	Breakdown Voltage in Oil kV	Shrinkage Longitudinal %	Shrinkage Transverse %	Moisture Content %	Electrical Conductivity of Aqueous Extract μS/cm
DPP 0.06	≥ 1	≥ 70	≥ 40	≥ 0.5	≥ 5	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.075	≥ 1	≥ 80	≥ 50	≥ 0.9	≥ 7	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.125	≥ 1	≥ 80	≥ 50	≥ 1.2	≥ 8	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.175	≥ 1.2	≥ 80	≥ 50	≥ 1.4	≥ 11	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.20	≥ 1.2	≥ 80	≥ 50	≥ 1.4	≥ 11	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.25	≥ 1.6	≥ 80	≥ 50	≥ 2.0	≥ 13.5	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.30	≥ 1.6	≥ 80	≥ 50	≥ 2.0	≥ 13.5	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.38	≥ 2	≥ 80	≥ 50	≥ 2.5	≥ 15	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.40	≥ 2	≥ 80	≥ 50	≥ 2.5	≥ 15	≤ 1.2	≤ 2	≤ 7	≤ 80
DPP 0.50	≥ 2	≥ 80	≥ 50	≥ 2.5	≥ 15	≤ 1.2	≤ 2	≤ 7	≤ 80

**STORAGE**

PAR DPP must be stored in dry conditions, in its original packaging, out of direct sunlight and at a maximum ambient temperature of 30°C.

To avoid cold flow and blocking, store master reels standing up and slit tapes lying flat without radial pressure.

**SHELF LIFE**

Temperature	5°C	30°C
Minimum shelf life (Months)	24	12