

Lamination Accessories

Press Pad ACC-16-1

Product Description

ACC-16-1 is a press pad made of silicone rubber with a high tensile strength glass weave as a core material. ACC-16-1 provides very good pressure equalising during lamination thus correcting slight imperfections in the non-alignment of the press plates. ACC-16-1 is best suited for pressing of flexible circuits.

ACC-16-1 is an improvement over a press pad having been in use over many years. It shows an extended life of more than 50 % compared to other similar materials in use so far.

During lamination of multilayer boards the different copper clad panels are pressed together with prepreg. There are two reasons for needing a special press pad material:

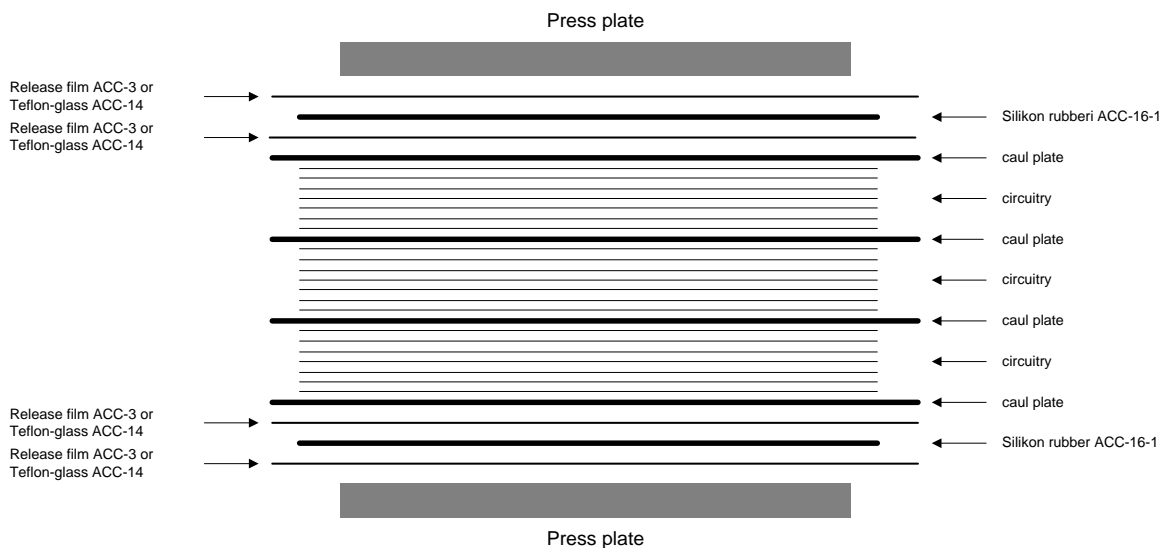
- Equaliser in order to compensate unevenness of the surface and in order to obtain a uniform pressure over the entire package, thus reducing the risk of air entrapment's.
- Control of temperature rise in the package. The temperature rise is very critical for the correct resin flow.

A press pad must be resistant against harsh laminating environments. Often temperatures up to 230 °C and pressures between 17 and 31 bar are encountered. The time in the press may amount to 1,5 hours under these conditions. ACC-16-1 was developed to meet such requirements.

Press pad ACC-16-1 can be used multiple times because it is functional up to 260 °C. It has an excellent resistance to stress and it relaxes completely afterwards. The temperature rise characteristic in the press package will not change even after repeated use of ACC-16-1. The temperature rise can be controlled by selecting various pad thicknesses. The glass weave improves the dimensional stability and avoids lateral movement of the rubber under pressure.

As ACC-16-1 can be used many times it is economical as press pad material even if compared to Kraft-paper.

The requirements for press pad materials vary tremendously. We are able to offer modified materials in addition to our standard range of products, please consult us.



Features

- Fibre glass-cloth resistant against high pressures
- Various thicknesses available for easy adaptation to different thicknesses of flexible circuits
- Thermal post-curing eliminates outgassing and increases elasticity
- Smooth, non-porous surface

Sizes and Dimensions

ACC-16-1 is available from stock in standard thickness of 1.6 mm. The standard roll is 965 mm wide and 10 m long. Thicknesses 2.4 and 3.2 mm are available on demand.

ACC-16-1 can also be supplied in cut-to-size panels with or without registration holes.

Recommendation

Optimum results are being obtained when ACC-16-1 is used in conjunction with the other HOLDERS laminating accessories such as ACC-4 and ACC-3 and ACC-14 as well as CIMCU-Copper foil.

Product Data

Breaking strength:	70 N/mm
Burst strength:	5 516 kPa (hydrostatic)
Squeezing resistance:	over 172 MPa
Breaking elongation:	below 10 %
Thermal expansion X-Y:	8.46×10^{-6} mm/mm/°C
Thermal expansion z:	2.70×10^{-4} mm/mm/°C
Thermal conductivity:	6.91×10^{-4} cal/cm °C s
Specific Heat:	1.06 kJ/kg/k
Shore hardness at 1.6 mm:	79
Shore hardness at 2.4 mm:	72
Shore hardness at 3.2 mm:	67
Weight at 1.6 mm:	2.44 kg/m ²
Weight at 2.4 mm:	3.53 kg/m ²
Weight at 3.2 mm:	4.88 kg/m ²
Glass weave thickness:	0.34 mm

The above statements are based on our present knowledge. Our statements should not be interpreted as a guarantee of characteristics. The use of our products by our customers is subject to different conditions, therefore none of our customers are relieved of the responsibility of testing our products by themselves. A liability for consequential damage will not be accepted in any case. For damage resulting from the use of this information we can only be held responsible if there is evidence of malice or negligence on our part. This data-sheet replaces any previous data sheets.