

# FOTOBOARD2...the photosensitive copper laminate system

## PRODUCT DESCRIPTION

FOTOBOARD2 is a high quality pre-sensitised laminate, ideal for producing small numbers of printed circuit boards (PCBs) for use by design engineers or for work in the classroom or laboratory. Its key benefits are that it enables the manufacturing process to be fast and consistent - for both single and double sided boards.

All materials used in the manufacture of FOTOBOARD2 are high quality. This, together with our technical expertise and stringent manufacturing controls, ensures the high standard of every product which is delivered to our customer.

FOTOBOARD2 is coated with a positive working photo resist which is inherently capable of reducing defects caused by dust and dirt on the photowork and printing frame. The unexposed photo resist remains hard after exposure to form the image or circuit pattern and remains unaffected by the developing process.

The unexposed resist is a blue/green in colour and when exposed, tends to go a shade lighter - the change can be seen in daylight.

To ensure a uniform coating thickness, we have incorporated a roller coating system in our production line. This gives more stability, particularly in the final processes, and consistency from batch to batch.

The board's final coat is a low tack black film which affords mechanical and light protection.

## FOTOBOARD2 SPECIFICATION

Two basic substrates are used in the manufacture of FOTOBOARD2. FR4 and CEM/1 are both rigid composite laminates - standard thickness 1/16" (1.6mm)  $\Omega/\Omega$ , 1/0, 1/1, copper.

**FR 4** is a material composed of class woven glass cloth and copper foil. It is flame retardant according to UL-94 grade V-O.

The laminate meets most commonly used specifications and

is tested according to NEMA, LI-1: MIL-P-13949 and IEC249-2-5.

- Thickness tolerances to MIL-P-13949H Class II and IEC 249-2-5 (TAB II)
  - Copper surface aspect to MIL-P-13949H
  - Copper foil to IEC 249-3 Type A electrodeposited copper foils
  - Copper thickness to IEC 249-3A Class I (TABIII)
- Up to a maximum thickness of 3.2mm can be supplied on request.

**CEM/1** is a material composed of a paper-based core impregnated with epoxy resin, glass woven face sheets impregnated with epoxy resin and copper foil. Like FR 4, it is flame retardant according to UL-94 grade V-O and meets most commonly used specifications. It is tested according to NEMA, LI-1: IEC249-2-9.

- Thickness tolerances to IEC 249-2-9 (TAB I)
  - Copper surface aspect to MIL-P-13949G
  - Copper foil to IEC 249-3
  - Copper thickness to IEC 249-3A Class I (TABII)
- Up to a maximum thickness of 3.2mm can be supplied on request.

