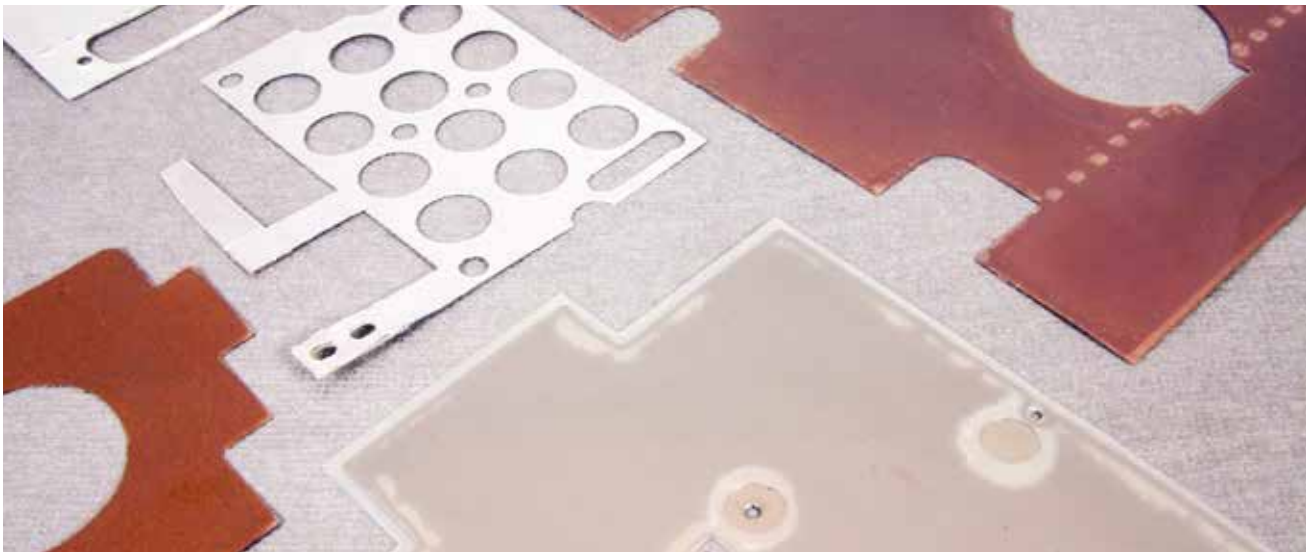
# EMI Shielding Laminates



## Product Overview

Custom designed shielding laminates are manufactured with electrically conductive metal foil laminated to another substrate often a non-conductive material such as melinex. The conductive media can be insulated across the whole surface or selective areas. This can then be made self adhesive backed.

## Application

A unique range of laminated shields applying selective die cutting techniques for cost effective solutions to a variety of shielding problems. Available in a wide range of materials and thicknesses.

Shielding laminates are commonly provide a removable RFI/EMI shield in PCB housings, key board, touch panel shields and for isolating components in electronic enclosures.

## Availability

Bespoke Laminates can be produced quickly to suit particular applications and provide a more effective solution than a standard product.

Die cutting is a flexible process offering a cost effective product with quick turn round times.

- Lower cost than conductive coatings
- Effective attenuation
- Recyclability
- Lower tooling and set up costs
- Insulating capabilities
- Scratch resistant
- Short lead times
- Easy prototyping

## Design Considerations

Factors such as size, volume, accessibility of components etc will dictate the design suited to a particular application but careful consideration should be given when choosing the required material.

## Production Capabilities

Kemtron has considerable experience in the design, manufacture of a wide range of shielding products and is able to help customers find solutions to their shielding requirements.

## Specifications

As laminates are custom designed please contact our sales department to discuss your requirements. We will need a drawing or specification giving overall dimensions, type of material configurations, quantity, tolerances, packaging and any special requirements.



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## Adhesives & Foils

| Adhesive | Thickness | Foil Material | Standard Thickness |
|---|---|---|---|
| Acrylic | 0.001" | Copper | 0.0014" to 0.008" |
| | 0.002" | Tin Plated Copper | 0.0014" to 0.008" |
| | 0.005" | Aluminium | 0.002 to 0.015" |
| Rubber | 0.0034" | Stainless Steel | 0.002" to 0.015" |
| Conductive | 0.002" | | |

## Insulating Substrates

| Material | Trade Name | Thickness | UL Fire Rating | Max. Width |
|---|---|---|---|---|
| Polyester | Mylar® | 0.001 – 0.014" | 94 VTM-2 | 72" |
| Polycarbonate | Lexan® | 0.005 – 0.062" | 94 V-2 – 94 V-0 | 48" |
| Polypropylene | Formex/Statex® | 0.010 – 0.062" | 94 VTM-0 – 94 V-0 | 24" |
| Polyvinylchloride | | 0.010 – 0.040" | 94 HB – 94 V-0 | 54" |
| Polyamide | Nomex® | 0.005 – 0.030" | 94 V-0 | 36" |
| PBTP | Valox® | 0.003 – 0.030" | 94 VTM-0 – 94 V-0 | 48" |
| Polyimide | Kapton® | 0.001 – 0.005" | 94 V-0 | 36" |

## Notice

Information supplied in these data sheets is based on independent and laboratory tests which Kemtron believes to be reliable. Kemtron has no control over the design of customer's product which incorporates Kemtron's products, therefore it is the responsibility of the user to determine the suitability for his particular application and we recommend that the user make his own test to determine suitability.

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