

CIM-ALU 1001

Version: A1

Drill Entry Board

Product Description

CIM-ALU 1001 is a drill entry board based on a new aluminium alloy developed for CIMATEC, resulting from our long time experience with CIM-ALU 2002. It was opti-mised to meet the stringent quality standards of the modern circuit board industry. Fine line and multilayer circuits require precision drill materials, and the increasing ratio of micro holes demands from a drill board material characteristics which standard aluminium foil cannot provide.

With CIM-ALU 1001 a drill entry material is offered which meets the special technical and economical micro drilling requirements.

Features

- > Significant increase of drill bit life due to an optimised alloy for the micro drilling process; the special alloy has good chipping properties and thus keeps the cutting edges of the drill clean and reduces the danger of epoxy resin build-up in the flutes; the excellent heat dissipation cools the drill bit, especially if used in conjunction with drill back-up materials of the CIMWOOD series - a clean and cool drill lasts considerably longer
- > Protection of the circuit board against scratches and pressure foot marks (scrap reduction)
- > Routing is possible without major burr when 2-edge-routers are used
- > Optimum drill centering due to defined surface roughness
- > Reduced burr and drill wandering because of excellent planarity due to usage of tension levelling equipment during the manufacturing process of CIM-ALU 1001
- > Excellent burr reduction due to high surface hardness and material stiffness
- > Elimination of hole contamination due to an alkaline

degreasing step

- > Reduced risk of drill breakage due to a smooth and scratch free surface
- > Various thicknesses for optimum adaptation to different technical and handling conditions
- > Available in individual panel sizes with or without punched registration holes; fast and inexpensive

Technical Data	
Temper	H 18 hard
Tensile strength	> 190 Mpa; EN 541
Elongation	> 3 %
Surface roughness	approx. 3.5 µm ± 1 µm
Warpage	< 1 % of edge length
Thickness tolerance	± 10 %

Recycling

CIM-ALU 1001 can be totally recycled. The energy needed for the recycling process is only 5 % of the original energy spent to produce virgin aluminium sheets. Returning CIM-ALU to VENTEC saves cost and is an active step in environmental protection.

Quality Control

CIM-ALU is exclusively manufactured for VENTEC. The production meets DIN/ISO 9000 standards with tight tolerances far below usual DIN standards. VENTEC' strict manufacturing and quality control specifications do not allow any failure and ensure constant quality. These restrictions reduce the number of potential suppliers and exclude cheap imports from countries with a low technical and ecological level, but on the other hand the constant quality level of CIM-ALU ensures a smooth production flow at the pcb manufacturer and helps to prevent production losses due to inferior materials.

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Sizes and Packaging

Sheet sizes 1072 * 1162 mm, 927 * 1227 mm and 1.072 * 1.227 mm are available from stock.

Standard Packing Units		
Type 1001-15	0,15 mm ± 10 %	only coils on stock
Type 1001-18	0.18 mm ± 10 %	1.000 sheets/pal.
Type 1001-21	0.21 mm ± 10 %	800 sheets/pal.
Type 1001-24	0.24 mm ± 10 %	600 sheets/pal.

General Safety Information

- > Only use the product for applications described in the product data sheet
- > The product is intended for industrial use only
- > The product is not suitable for food industry
- > The product must not be eaten
- > In case of fire noxious fumes or smoke can be generated

Danger

Dust generation, do not inhale dust, comply with general dust limit value TRGS 553

Do not inhale fumes or smoke created during processing or by fire.

Protection Methods

Dust extraction or dust protection mask

Extinguishing Agent

Foam, powder, CO²

Environment

Comply with limit value for respirable dust
Dispose of waste safely