

RA Copper Foil CIMCU

Product description

CIMCU RA-Copper foil is a rolled annealed copper foil of highest purity for the use of outer layer while laminating of flexible circuits. The front side appears metallic semi-matt, the backside is matt due the special treatment preventing the excellent adhesion to the Prepreg. Both sides are covered by a very thin chemical anti-tarnish, protecting the surfaces to oxidation and corrosion. CIMCU RA-Copper foil is slit and cut very precise on advanced equipment, punched and packaged to customers requirements. Ongoing quality control assures the stable high product quality.

Application

CIMCU RA-Copper foil offering enhanced properties when using for flexible circuits compared to single sided copper clad laminate as outer layer material. HOLDERS is supplying only E-Cu-58-quality, available in thicknesses of ½ oz, 1,0 oz and 2 oz. Other thicknesses and/or copper foil types are available on request.

Product characteristics RA Copper Foil

Parameter	Unit	Product			ISO	
		18 µm	35 µm	70 µm	Specification	Test method
Copper Content	%	99,9	99,9	99,9	-	-
Condition	---	Soft			ISO/R1337	DIN 50133
Hardness	HV	40 - 60			ISO/R1337	DIN 50133
Area weight	oz/ft²	1/2	1	2	ISO/R1337	DIN 50133
	g/m²	145 - 153	285 - 295	575 - 585	ISO/R1337	
Copper roughness [R _z]	µm	1,5 - 2,5			ISO/R1337	DIN 50133
Treatment roughness [R _z]	µm	3,0 - 5,0			ISO/R1337	DIN 50133
Tensile Strength	N/mm²	> 160,0			ISO/R1337	DIN 50133
Elongation	%	> 8,0			ISO/R1337	DIN 50133
Peel Strength on FR-4	N/mm²	> 0,6			ISO/R1337	DIN 50133
Weldability	-	Very good	Very good	Very good	-	-
Anti-Oxidant	-	Good	Good	Good	-	-
Storage Period at RT	Days	365	365	365	-	-

Conclusion

All technical Data fulfil or exceed the requirements of the related DIN-, MIL- und IPC-Approvals (ANSI/IPC-MF-150F).

- CIMCU RA-Copper foil withstands to Oxidation longer than 2 hours at 180°C.
- The anti-tarnish could be removed easily, either chemically or mechanically.
- CIMCU RA-Copper foil could be etched without leaving residues with both, alkaline or acidic solutions.
- The solderability fulfils all international related approvals.

Cutting and Punching Service

CIMCU RA-Copper foil is supplied to customers requirements based on technical drawings, with or without registration holes. Shiny/shiny packaging is possible. Roll material and special copper alloys are available on request.

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
Be aware of sharp edges and corners

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

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.