

ED Copper Foil

Product description

ED Copper foil is a high purity IPC Grade 3 electrodeposited HTE copper foil.

The outer face of the foil is semi-matt and the inside surface is matt grey. This side has been specially treated to optimize adhesion to Pre-Preg. The foil is coated with a chemical anti-tarnish finish to protect the surfaces against oxidation and corrosion.

Application

ED Copper foil is used for foil lamination of multilayer printed circuit boards.

The enhanced elongation property of CIMCU copper foil is beneficial for thermal reliability of multilayer designs.

Ordering information

ED Copper foil is available from Holders in standard thicknesses of 18, 35 and 70 μm . Other thicknesses and/or copper foil types are available on request.

ED Copper foil is supplied in production ready cut panels to customers requirements, in packs of 100 pieces.

It can also be supplied, on request, according to customers requirements, with punched tooling holes as required and packaged "shiny-shiny" rather than stacked.

Product characteristics ED Copper Foil

| Parameter | Unit | Product | | | IPC | |
|--|--------------------|------------------|------------------|------------------|------------------------|------------------------|
| | | 18 μm | 35 μm | 70 μm | Specification IPC 4562 | Test method IPC TM-650 |
| Copper Content | % | 99,8 | 99,8 | 99,8 | - | - |
| Area weight | oz/ft ² | 1/2 | 1 | 2 | (a) 1.2.5, table1-1 | 2.2.12 |
| | g/m ² | 145 - 153 | 285 - 295 | 575 - 585 | (b) 3.4.4 | |
| Copper roughness [R _z] | μm | 0,2 - 0,4 | | | 3.5.6 | 2.2.17 |
| | $\mu\text{.inch}$ | 8,0 - 16,0 | | | | |
| Treatment roughness [R _z] | μm | 6,0 - 8,0 | 7,0 - 10,0 | 9,0 - 12,0 | 3.4.5 | 2.2.17 |
| | $\mu\text{.inch}$ | 236 - 315 | 276 - 394 | 354 - 472 | | |
| RT Tensile Strength [Transverse at RT] | Kg/mm ² | 32 - 40 | | | 3.5.2 | 2.4.18 |
| HT Tensile Strength [Transverse at 180 °C] | Kg/mm ² | > 20 | | | 3.5.1 | 2.4.18 |
| RT Elongation [Transverse at RT °C] | % | 3 - 10 | | | 3.5.3 | 2.4.18 |
| HT Elongation [Transverse 180 °C] | % | 3 - 10 | | | 3.5.3 | 2.4.18 |
| Peel Strength (RT) on FR-4 ⁽¹⁾ | kg/cm ² | > 1,4 | > 1,8 | > 2,1 | 3.5.4 | 2.4.8 |
| Anti-Oxidant | - | Good | Good | Good | - | - |

⁽¹⁾ Construction with a thickness of $\geq 0,5$ 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 a variety of conditions, therefore each user of the material should make his own tests to determine the material's suitability for his own particular use. No liability for consequential damage will be accepted in any case. This data-sheet replaces any previous data sheets.

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