

Copper Clad Boards (Half ounce) 500 Series



This 1/16" FR4 board is laminated with ½ oz copper per square foot. This flame retardant laminate is translucent in color and made of continuous woven glass cloth impregnated with epoxy resin. Complies with UL #E214381 (select boards comply to UL #E213990).

Features / Benefits

- 1/16" thickness
- ½ oz copper
- Flame retardant laminant

Typical Applications

- Outer layers on multi-layer boards
- Small productions runs
- Hobby projects

Specifications

Property	Pre-treatment	Index (FR-4)
Surface Resistivity		
After moisture resistance	F	≥ 10 4 M Ω
At elevated temperature	E-24/125	≥ 10 3 M Ω
Volume Resistivity		
After moisture resistance	F	≥ 10 6 M Ω
At elevated temperature	E-24/125	≥ 10 3 M Ω.cm
Dielectric breakdown (parallel laminations)	D-48/50+ D-0.5/23	≥ 40 KV
Permittivity at 1 MHz	C-40/23/50	≤ 5.4
Loss tangent at 1Mhz	C-40/23/50	≤ 0.035
Arc resistance	D-48/50+ D-0.5/23	≥ 60 S
Peel strength 35 micron copper		
As received	A	≥ 1.40 N/mm
After thermal stress	A	≥ 1.40 N/mm
Solder limits	288°C, 20S	No delaminating
	260°C, 20S	-
Flexural strength		
Lengthwise	A	≥ 410 MPa
Crosswise	A	≥ 340 MPa
Water absorption		-

0.10-0.77	E-1/105+des+ D-24/23	≤ 0.80 %
0.78-3.20	E-1/105+des+ D-24/23	≤ 0.35 %
Flammability	A&E-1/105+des	94V-0
Dimensional stability	E-4/105+des+E-2/150	±5.0 μm/cm

Available Sizes

Catalog No.	Size	Description
504 <DISCONTINUED>	3" x 5"	Single sided
510	6" x 6"	Single sided
516	8" x 10"	Single sided
551	6" x 6"	Double sided