广东生益科技股份有限公司
GUANGDONG SHENGYI SCI.TECH

S6018

Resin Coated Copper Foil for HDI Mulitilayer Board

特点

- 不包含玻纤布，适合于大规模激光钻孔或等离子蚀孔，用于制造高密度、高精度线路板。
- 不掉树脂粉，污染少。
- 精确控制的树脂流动度，能满足填埋孔及绝缘层厚度控制的要求。
- 低介电常数，有利于特性阻抗控制及提高信号传输速度。
- 可与现有PCB加工工艺相适应。

应用领域

用于制作更轻、更薄的电子产品如手机、PDA，数码摄象机等用的高密度多层板。

FEATURES

- Glass-free dielectric, suitable for mass microvia formation by laser or plasma ablation technique for high density, fine circuits.
- No resin powder and reduced contamination.
- Precisely controllable resin flow, satisfactory via plugging and dielectric layer thickness accuracy.
- Low Dk for improved impedance control, higher operation speed.
- Compatible with conventional PCB fabrication process.

APPLICATIONS

High density interconnect multilayer PCB for thinner and lighter products such as mobile phone, PDA, digital VCR, etc.

GENERAL PROPERTIES

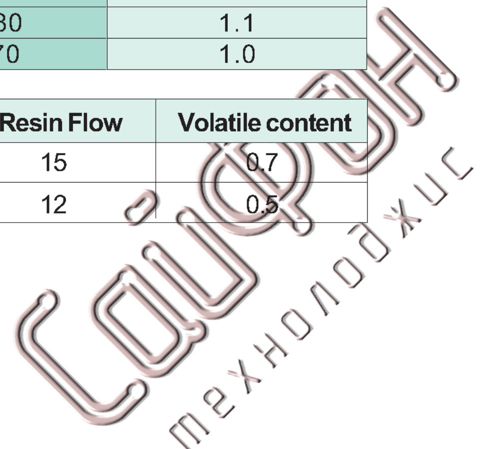
Test Item	Treatment Condition	Unit	Property Data	
			SPEC	Typical Value
Tg	DSC	℃	≥145	150
Flammability	C-48/23/50 E-24/125	-	V-0	V-0
Volume Resistivity	After moisture resistance	MΩ-cm	≥ 10^6	5×10^8
	E-24/125		≥ 10^3	5×10^7
Surface Resistance	After moisture resistance	MΩ	≥ 10^4	5×10^5
	E-24/125		≥ 10^3	5×10^6
Dielectric Constant	C-24/23/50,1MHz	-	≤ 5.4	3.7
Dissipation Factor			≤ 0.035	0.025
Dielectric Strength	D-48/50+D-0.5/23	KV/mm	–	45
Dissipation Factor	Methylene Chloride/10min	%	–	0.48
Thermal Stress	288℃,20s	-	No delamination	No delamination
Pressure Cooking Test	121℃ 2atms,30min+288℃,20s	-	No delamination	No delamination
Peel Strength 12μ Cu. Foil	288℃,10s	N/mm	≥ 0.80	1.1
	125℃		≥ 0.70	1.0

Item \ Typical Value	1+1	1+0.4Core+1	1+0.8Core+1
Water Absorption E-1/105+D-24/23,%	1.10	0.50	0.30

Specifications	Resin Flow	Volatile content
80T	15	0.7
65T	12	0.5

Explanations: C = Humidity conditioning;
D = Immersion conditioning in distilled water;
E = Temperature conditioning.

The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in ℃ and with the third digit the relative humidity.



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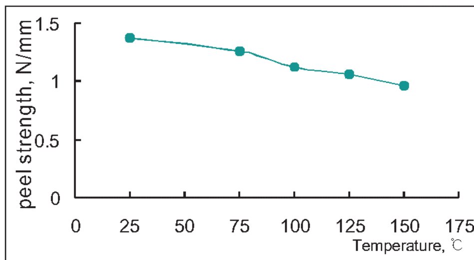
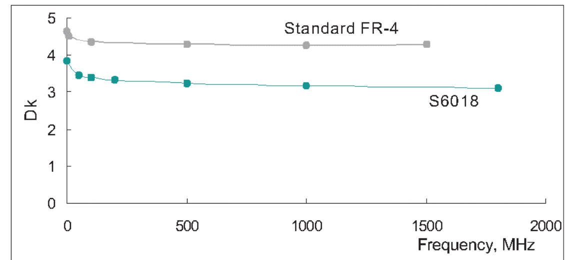
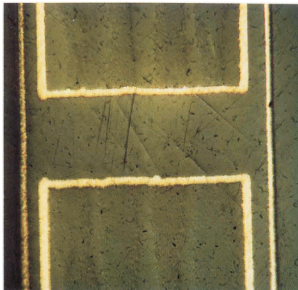
Peel strength



Dielectric constant

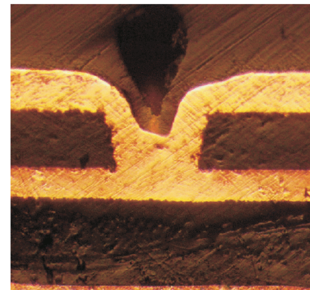


Hole Filling Capability



- Microsection observations have showed that hole filling capability with S6018 is OK.

Morphology of Laser Via



- Laser via diameter 100 micron.
- A number of laser vias were sampled for test and all of results fell into the acceptive range.

PURCHASING INFORMATION

Copper Foil	Resin Thickness	Thickness Tolerance	Product Size
9 μm(Q),12 μm(T), 18 μm(H)	30 μm to 100 μm	±2 μm	Available on request

※ The size and thickness could be available on request.
※ Only B-stage,60T express that the resin thickness is 60 μm,the copper style is 12 μm.
※ C-stage/B-stage,35/60Q express that C-stage resin thickness is 35 μm, B-stage resin thickness is 60 μm,the copper style is 9 μm.

HANDLING

- S6018 must be stored in vendor package, and avoid exposure to excessive moisture or temperature.
- Recommended storage conditions are 22℃ maximum at 45%±5% relative humidity.

Сайфон