



# S6015

## Halogen Free Resin Coated Copper Foil for HDI Multilayer Board

### 特点

- 不含卤素，无玻纤增强材料，适合HDI的高效率激光钻孔。
- 可与常规FR-4粘结片媲美的存放期。
- 优良的铜箔结合力和优秀的耐碱洗性。
- 适应常规的HDI制作工艺。

### 应用领域

适应无卤化趋势的手持电子产品，如手机、PDA，摄录一体机等。

### FEATURES

- Halogen-free, glass free dielectric, suitable for high efficient laser via formation for high density interconnect.
- Extended shelf life, comparable with conventional FR-4 prepreg.
- High copper peel strength and excellent alkaline resistance.
- Compatible with conventional HDI fabrication process.

### APPLICATIONS

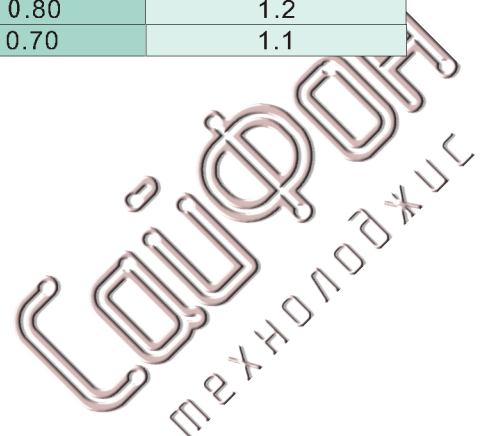
Hand-held electronics such as mobile phones, PDA and digital camcorders etc., to meet halogen free trend.

## GENERAL PROPERTIES

Test Item	Treatment Condition	Unit	Property Data	
			SPEC	Typical Value
Tg	DSC	°C	≥ 140	145
Flammability	C-24/23/50	-	UL94V-0	UL94V-0
	E-24/125+des			
Volume Resistivity	After moisture resistance	MΩ-cm	≥ 10 <sup>6</sup>	10 <sup>8</sup>
	E-24/125		≥ 10 <sup>3</sup>	10 <sup>7</sup>
Surface Resistivity	After moisture resistance	MΩ	≥ 10 <sup>4</sup>	10 <sup>9</sup>
	E-24/125		≥ 10 <sup>3</sup>	10 <sup>6</sup>
Dielectric Constant	C-40/23/50, 1MHz	-	≤ 4.0	3.8
			Dissipation Factor	≤ 0.035
Dielectric Strength	D-48/50+D-0.5/23	KV/mm	≥ 30	42
Alkaline Resistance	10%NaOH;90°C/60min	%	-	No change
Thermal Stress	288°C, 20s	-	-	Pass
Pressure Cooking Test	121°C 2atms, 30min+288°C, 20s	-	-	Pass
Peel Strength	12μ Cu. Foil	N/mm	≥ 0.80	1.2
			≥ 0.70	1.1

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

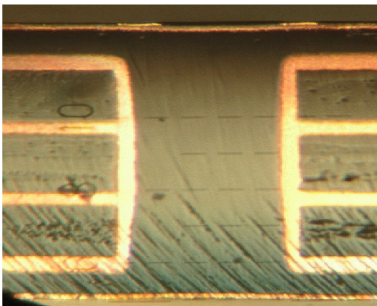
The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in °C and with the third digit the relative humidity.



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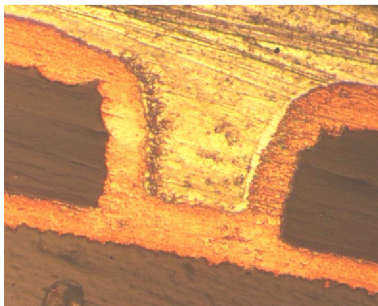
Halogen Free Resin Coated Copper Foil for HDI Multilayer Board

## ■ Excellent Hole Filling Capability



Hole plugging  
directly by RCC resin

## ■ Laser via reliability



After 3 times 288°C/10 Seconds  
Soldering Thermal Shock

## PURCHASING INFORMATION

Copper Foil	Resin Thickness	Thickness Tolerance	Product Size
12 $\mu\text{m}$ (T), 18 $\mu\text{m}$ (H)	60-80 $\mu\text{m}$	$\pm 5 \mu\text{m}$	Available on request

- ✘ The size and thickness could be available on request.
- ✘ Only B-stage,60T express that the resin thickness is 60  $\mu\text{m}$ ,the copper style is 12  $\mu\text{m}$ .
- ✘ C-stage/B-stage,35/60T express that C-stage resin thickness is 35  $\mu\text{m}$ , B-stage resin thickness is 60  $\mu\text{m}$ ,the copper style is 12  $\mu\text{m}$ .

## HANDLING

- S6015 must be stored in vendor package, and avoid exposure to excessive moisture or temperature.
- Recommended storage conditions are 25°C maximum at 50 $\pm$ 5% relative humidity.