

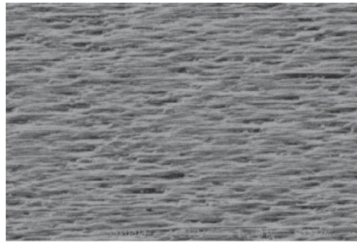
## 低峰值铜箔 (LP)

## 技术特性

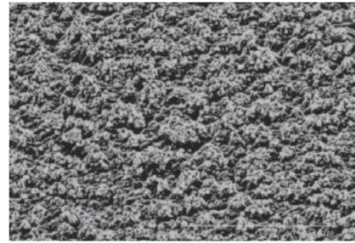
- 高级单面处理电解铜箔，厚度均匀、无针孔
- 经粗化处理，产品具有超低峰值特性
- 具有卓越的蚀刻性能

## Technical character

- Advanced single-side treated electrolytic copper foil, uniform thickness, and pinhole-free
- Possessing the characteristic of ultra-low peak value by abrading the product
- Outstanding performance of etching



光面处理峰型: Peak Type for Shining-treated Side



毛面处理峰型: Peak Type for Matte-treated Side

## 备注:

- 适用于多层PCB超薄内层 (FR-4)
- 适合精细线路或有阻抗值控制产品
- 适用于高频基材制作内层薄芯板
- 不应在高温 (高于30℃) 高湿 (相对湿度在70%以上) 条件环境下长时间贮存
- 品质依据GB/T5230-1995及IEC 标准

## Remarks:

- Applicable to the ultra-thin layer (FR-4) of multi-layer PCB
- Suitable for fine lines or impedance control products
- Applicable to the high-frequency material in the production of inner thin coreboard
- Should not be stored at a high temperature (higher than 30℃) and high humidity (relative humidity above 70%) for a long time
- The quality is based on the GB/T5230-1995 and IEC standard

General Properties 一般特性 (1OZ/35 $\mu$ )

测试项目 Test Item	单位 Unit	处理条件 Condition	测试方法 Testing Method	规范值 Specification Value	典型值 Typical Value
纯度(包括银含量) Purity (Silver Content Included)	%	A	IPC-TM-650 2.3.15	$\geq 99.80$	99.95
				IPC-4562 3.8.1.1	
拉力强度 Tensile Strength	N/cm <sup>2</sup>		IPC-TM-650 2.4.18	$\geq 28000$	35000
				IPC-4562 3.5.1	
延伸率 Elongation	%		IPC-TM-650 2.4.18	$\geq 3.0$	10.0
				IPC-4562 3.5.3	
面积重量 Area Weight	g/m <sup>2</sup>		IPC-TM-650 2.2.12	275-295	285
				IPC-4562 3.4.4	
剥离强度 Peeling Strength	Kgf/cm		IPC-TM-650 2.4.8	$\geq 1.60$	1.80
				IPC-4562 3.5.4	
高温抗氧化性 Heat Resistance	/	E-30/200	IPC-TM-650	S面不氧化	OK
				M面不变色	
耐化学性 Chemical Resistance	%	18%HCL-60min/25 $^{\circ}$ C	IPC-TM-650	$\leq 4.0$	2.1
可蚀刻性 Etch ability	/	A	IPC-TM-650 2.3.6	金属箔表面处理, 能正常的蚀刻工艺除去	OK
				IPC-4562 3.6.1	
可焊性 Solder ability	/		IPC-TM-650 2.4.12	不应有焊料不润湿的迹象	OK
				IPC-4562 3.6.3	
质量电阻率 Surface Resistivity	$\Omega \cdot g/m^2$	C96/35/90	IPC-TM-650 2.4.14	$\leq 0.162$	0.153
				IPC-4562 3.8.12	
粗糙度 Roughness	光面 Shining side -Ra	A	IPC-TM-650 2.4.17	$\leq 0.43$	0.21
				IPC-4562 3.5.6	
	毛面 Matte side -Rz		IPC-TM-650 2.4.17	$\leq 7.0$	4.0
				IPC-4562 3.5.6	

Remarks: Typical values for reference only

注:典型值仅作参考Stand values according to IPC-4562 规范值参照IPC-4562

A=Maintain original shape, do not make handling 保持原样, 不作处理

C=Temperature and humidity conditioning 在恒温恒湿的空气中处理

E=Temperature conditioning 在恒温的空气中处理