广东生益科技 FCCL 产品供货技术规范

Technical Specification on SYST FCCL Product Supply

产品名称：覆盖膜

Product Name: Coverlay

产品规格：**SF305C 0515**

Product Specification: SF305C 0515

客户确认签章：

Purchaser Signature:

确认日期：　　年　月　日

Date confirmed:

编制(The preparation of)：　　**审核(Audit)：**

1 适用范围Scope

本技术规范依据IPC-4203标准编制，适用于FPC用覆盖膜SF305C，并对其外观、尺寸、物化性能、包装、标识、贮存及品质保证作出相应规定。

This technical specification for coverlay SF305C is made in accordance with IPC-4203 standard, and establishes the appearance, size, physical and chemical properties, packaging, labeling, storage and quality assurance of SF305C used for FPC.

2 产品编号、规格及描述Product code, specification and description

产品编号Product code：SF305C

产品规格Product specification：SF305C 0515

产品描述Product description：覆盖膜 PI为0.5mil、AD为15um (无卤)

Coverlay, PI film thickness is 0.5mil, adhesive thickness is 15μm, halogen free

3 质量和技术要求Quality and technical requirement

3.1 产品外观Product appearance

3.1.1 不应有皱纹、折痕和影响使用的条纹、划痕、色斑、脏污。

The coverlay should be free of wrinkles, scratches, spots and stains.

3.1.2 不允许有金属性夹杂物，非金属夹杂物在任何方向的尺寸应不大于 0.50mm。

The coverlay shall be free of metallic inclusions, and the size of non-metallic inclusions shall not be >0.50 mm in any direction.

3.1.3 不应有缺胶、撕裂和分层这些缺陷。

The Coverlay shall be free of lack of adhesive, tearing and lamination.

3.1.4 距卷材边缘 6.5mm 内的任何缺陷可忽略不计。

Any defect within 6.5 mm of the outside edges of the sheet or roll shall be disregarded.

3.2 产品尺寸 Product size

3.2.1 宽度和长度 Width and length

片材的宽度和长度应在采购文件中规定，宽度和长度应在规定值+3/-0mm 范围内，或由供需双方商定。

卷材的宽度和长度应在采购文件中规定，卷宽应在规定值+2/-0 范围内，卷长应在规定值+1%/-0%范围内，或由供需双方商定。

The width and length of sheets of coverlay shall be as specified in the procurement document. The width and length shall be within +3/-0 mm of the value specified, or as agreed upon between purchaser and vendor.

The width and length of rolls of coverlay shall be as specified in the procurement document. The width and length shall be within +2/-0 mm of the value specified, the length of each roll shall be within +1%/-0% of the value specified, or as agreed upon between Purchaser and vendor.

3.2.2 接头数 Splice number

覆盖膜的接头数和接头间的最短距离应符合表 1 的要求。接头部分应采用耐热性与耐溶剂性良好的胶带连接。接头处应用明显的标记，此标记应超出卷边大于 6.35mm。

Splice number and the shortest distance between splices of coerlay shall be in accordance with the requirements of Table 1. The connection of splices shall be used with good heat-resistant and solvent-resistant adhesive tape. The splice shall be apparently marked, and this marking shall be >6.35mm beyond roll edge.

表 1　接头数和接头间的最短距离

Table 1　Splice number and the shortest distance between splices

卷长（米） Length（m）	接头数（个） Splice number	接头间最短距离（米） The shortest distance between splices（m）
≤100	≤5	10

3.2.3 厚度 Thickness

覆盖膜的厚度是指 PI 膜的厚度和胶粘剂的厚度二者加在一起的总厚度，覆盖膜的厚度偏差为标称值的±3μm。

The thickness of coverlay include the thickness of PI film and the thickness of adhesive, the deviation from the nominal thickness of coverlay shall be within ±3μm.

4 物化性能 Physical and chemical properties

覆盖膜的理化性能应符合表 2 的规定。

The physical and chemical properties of coverlay shall be as indicated in table 2.

表 2　覆盖膜的物化性能 Table 2　The physical and chemical properties of coverlay

试验性能 Property to be tested		指标值 Requirement	单位 Units	IPC-TM650 试验方法 IPC-TM650 test method
剥离强度 Peel Strength	接收态 As Received	≥0.7	N/mm	2.4.9 方法 A 或 B Method A or method B
	热应力后 After Solder Float	≥0.525		2.4.9 方法 C 或 D Method C or method D
尺寸稳定性 Dimensional Stability		±0.15	%	2.2.4 方法 B Method B
		±0.20		2.2.4 方法 C Method C
溢胶量 Resin flow		≤0.15	mm	2.3.17.1
挥发份 Volatile Content		≤4.0	%	2.3.37 方法 A method A
耐化学性 Chemical Resistance		≥80	%	2.3.2 方法 A method A
热应力（288℃，20s）Solder Float		通过	-	2.4.13
介电常数(1MHz) Dielectric Constant(1MHz)		≤4.0	-	2.5.5.9
介质损耗角正切(1MHz) Dissipation Factor(1MHz)		≤0.040	-	2.5.5.9
体积电阻率(湿热) Volume Resistivity (Damp Heat)		$\geq 10^6$	MΩ.cm	2.5.17

表面电阻(湿热) Surface Resistance (Damp Heat)	≥10^4	MΩ	2.5.17
电气强度 Dielectric Strength	≥79	V/μm	2.5.6.2
吸水率 Moisture Absorption	≤4.0	%	2.6.2
燃烧性 Flammability	UL94 V-0	等级 rating	2.3.9

5 包装、标识和贮存

5.1 产品用纸箱包装。Coverlay shall be individually wrapped in a Carton.

5.2 包装上应有以下标识：Each package shall be marked with the following information:

1) 产品型号；Product code;

2) 薄膜的方向性（用箭头表示纵向）；Film direction (Arrow indicates mechanical direction);

3) 宽度和长度；Width and length;

4) 数量；Quantity;

5) 制造厂名称；Manufacturer's name;

6) 制造日期；Manufacturer's date;

7) 生产批号；Lot number;

8）接头数数目；Splice number;

9）贮存条件；Storage conditions;

10）贮存期限。Shelf life.

5.3 覆盖膜在运输和贮存中，应防止雨淋、高温、机械损伤及日光直射。覆盖膜应离地平放，贮存在干燥、无腐蚀气体的室内，温度控制在 10℃以下，保质期为 3 个月，需方应在保质期内将覆盖膜用完，供方不保证超过保质期的覆盖膜的质量。

When the transport and storage of coverlay, it shall be to prevent rain, high temperature, mechanical damage and direct sunlight, placed away from the land, stored in dry, non-corrosive gases warehouse; Three months when stored in the original packaging at 10℃ below. Purchaser shall be used this product in the shelf-life period.

6 使用注意事项 Caution

6.1 不能用手触膜胶粘剂面，以免触摸部份污染。

Don't touch the surface of adhesive with hands, so as to avoid pollution of coverlay.

6.2 产品不能直立放置，以免产生火箭筒现象。

Coverlay can not be placed upright, so as to avoid the phenomenon of rocket launchers.

7 技术服务 Technical Service

供方应不定期走访需方，了解本产品在需方中的使用情况，提供产品使用指南，并及时处理需方在使用本

产品过程中碰到的与本产品相关的技术问题。

Supplier shall be visited purchaser from time to time, understand the use of the products, provides the product operating guide, and deal with the technical problem of this product in time.

8 环境管理物质和质量保证 Environmental management material and quality assurance

8.1 覆盖膜应不含有铅、汞、镉、六价铬、多溴联苯、多溴联苯醚等环境管理物质，供方应及时提供这些环境管理物质的第三方检测报告给需方。

Coverlay shall not contain environmental management material, such as lead, mercury, cadmium, hexavalent chromium, PBBs, PBDEs, supplier shall be timely provided the third-party testing report of these environmental management material to purchaser.

8.2 每批交货均提供质量保证书及检验报告。

For each shipment, supplier shall be provided quality guarantee and inspection report.

9 有效期 Term of validity

本供货技术规范有效期为需方接受的日期起一年内，供需双方各执一份，若在有效期内供需双方没有在文件上要求变更上述内容，有效期自动延长一年，依此类推。

The term of validity of this technical specification is one year from the date of Purchaser signature, supplier and purchaser hold one respectively it. If supplier and purchaser has not changed the above content of this technical specification in the term of validity, the term of validity of this technical specification automatically extend for one year, and so on.

10 附件 Appendix

附件一 SGS 环境物质测试报告

Appendix 1 SGS Environmental material test report