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# LCP薄膜

特殊溶液铸造技术

热致液晶聚酯薄膜



## 超级工程塑料「LCP」的特点

### 【KGK LCP的特性】

作为芳香族聚酯树脂、具有芳香族的刚性和耐热性、同时因聚酯的高结晶度而具有强度、在熔融状态下，具有规则的结构，分子并列。

LCP的特长是作为超级工程塑料的耐热性与高强度（结晶性）。

LCP独有的特征则为阻气性与高频下的低介电、高绝缘的特性。

KGK的LCP为了除去在熔融状态(非晶态)下取向的性质(由于重心偏移导致的强度等特性的失衡化)，不是通过熔融成形( melt molding )，而是通过溶液浇筑法( solution casting method )，从而得到柔软性和高强度的特性。

通过KGK Special solution casting method (KGK特殊溶液浇筑法)生产的Liquid crystal polymer film (液晶聚合物薄膜)，便是

特殊溶液浇筑热致液晶性全芳香族聚酯薄膜

( Special Solution Casting Thermotropic Liquid Crystalline Polyester Film)

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# 性能

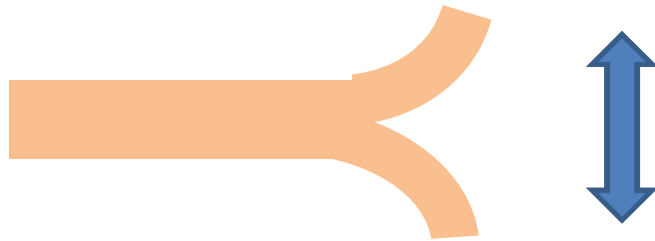
电气特性			
相对介电常数	-	1GHz	3.09
体积电阻率	$\Omega \cdot \text{cm}$	23°C	$39 \times 10^{17}$
吸水特性			
吸水率	ppm/°C	85°C/85%RH@168hr	< 0.1
机械特性			
抗拉强度	Mpa	25°C	60 <sup>*1</sup>
拉伸模量	Mpa	25°C	3000 <sup>*1</sup>
拉伸率	%	25°C	7 <sup>*1</sup>
耐热性			
焊料耐热性	-	270°C/30 sec	PASS
		300°C/3 sec	PASS
熔点	°C	DSC method	316
导热系数	W/m · K	-	0.38

\*1 Aneling : 300°C/60min

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# 撕裂强度

LCP Film	KGK	竞品
生产工艺	浇筑	挤出(熔融工艺)
撕裂传播阻力(mN)	54	38



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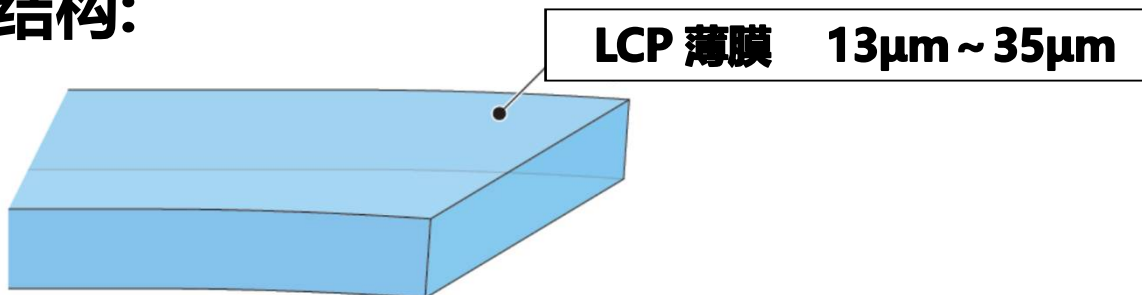
# 对比

Item		Unit	LCP	PET	PI
熔点 ( Tg)			316	149	>300
焊料耐热性		270°C × 30s	○	×	○
介电特性	介电常数	1GHz	3	3.2	3.3
	介电损耗角正切	1GHz	0.004	0.005	0.009
吸水率： 85 °C × 85% RH × 168 h		(%)	<0.1	0.3	1.6
水蒸气透过率 常温 x 24h		(%)	1.3	2.2	2

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# 规格

结构:



尺寸:

产品	厚度( $\mu$ m)	颜色	卷材尺寸
SAR 13	13	棕色	300mm x 20M
SAR 20	20		
SAR 25	25		
SAR 30	30		
SAR 35	35		

\*更多不同的厚度和宽度请咨询我们

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# LCP Film

## Special Solution Casting Technology Thermotropic Liquid Crystalline Polyester Film

User is responsible for determining whether the KGK product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a KGK product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a KGK product. Given the variety of factors that can affect the use and performance of a KGK product, some of which are uniquely within the user's knowledge and control. It is essential that the user evaluate the KGK product to determine whether it is fit for a particular purpose and suitable for the user's method of application. KGK make no warranties on above data.



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