

## 金属化聚丙烯薄膜

### Metallized PP (Polypropylene) films

◆ 特点 Feature

金属化薄膜是在真空状态下，将铝或锌铝蒸镀到薄膜的表面。该材料介电常数大，绝缘电阻高，耐热性能好，抗拉伸性能好，适用于制作金属化聚丙烯薄膜电容器。

The AL or ZN-AL layer deposited by evaporation under vacuum, big dielectric constant and insulation resistance, and excellent shrinkage and tensile strength. Widely used in Metallized PP film capacitors.

◆ 类型 Type

Type	产品名称 Name of product
AP-S	单面单留边铝金属化聚丙烯膜 Single margin OPP film with onside AL metallized
AP-T	单面双留边铝金属化聚丙烯膜 Double margin OPP film with onside AL metallized
AP-M	单面中留边铝金属化聚丙烯膜 Middle margin OPP film with onside AL metallized
APH-S	单面单留边铝金属化加厚边聚丙烯膜 Single margin OPP film with onside AL metallized and heavy edge
APZH-S	单面单留边锌加厚边铝金属化聚丙烯膜 Single margin OPP film with onside AL metallized and ZN heavy edge
ZAPH-S	单面单留边锌铝金属化加厚边聚丙烯膜 Single margin OPP film with onside ZN-AL metallized and heavy edge
ZAP-T	单面双留边锌铝金属化聚丙烯膜 Double margin OPP film with onside ZN-AL metallized
ZAPH-M	单面中留边锌铝金属化加厚边聚丙烯膜 Middle margin OPP film with onside ZN-AL metallized and heavy edges
AP-R	单面多串式留边铝金属化聚丙烯膜 Internal many series OPP film with onside AL metallized

注：以上型号是常用型号，如果需要别的金属化膜，请联系我们；对于高温聚丙烯膜，型号表示方式就是在上述型号前加 H，如 HAP-S。

Note: Above the type are general, if you need other metallized film, please contact us. For high temperature OPP films, add H on the above type, for example: HAP-S.

◆ 厚度 Thickness ( $\mu\text{m}$ )

Thickness( $\mu\text{m}$ )	3.5 ~ 20.0
Tolerance	$\pm 10\%$

◆ 宽度和留边 Width and Margin width

宽度 Width  $\geq 4.5\text{mm}$ ,

留边 Margin width  $0.25\text{mm} \sim 4.0\text{mm}$

◆ 方块电阻 Square resistance

方阻值( $\Omega/\square$ ) Square resistance	偏差 Tolerance
1.0~2.4	$\pm 25\%$
>2.4	$\pm 30\%$

◆ 膜卷内径、外径 Inside core diameter and Roll outside diameter

Inside core diameter(mm)	Roll outside diameter(mm)
$75^{+1}_{-0.5}$	155(130-160)
	175(135-180)
	240(200-250)
	300(260-320)

◆ 薄膜宽度和留边的允许偏差 The tolerance of film width and margin width

薄膜宽度 (B) 及允许偏差 (mm) Film width (B) and tolerance (mm)		留边宽度 (b) 及允许偏差(mm) Margin width (b) and tolerance (mm)	
$B \leq 6.4$	$\pm 0.1$	$b \leq 0.3$	$\pm 0.15$
$6.4 < B \leq 30.0$	$\pm 0.15$	$0.3 < b \leq 1.0$	$\pm 0.2$
$B > 30.0$	$\pm 0.2$	$1.0 < b \leq 2.0$	$\pm 0.25$
		$b > 2.0$	$\pm 0.3$

◆ 聚丙烯基膜技术指标

**Technical date of polypropylene film**

项目 Item	聚丙烯膜 Polypropylene	测试标准 Test condition
密度(g/cm <sup>3</sup> ) DENSITY	0.91	
抗拉强度(Mpa) TENSILE STRENGTH	≥100	
弹性模量 Mpa) MODULUS OF ELASTICITY	≥2300	
拉伸率(%) ELONGATION AT BREAK	MD ≥80 TD ≥50	
热收缩率(%) SHRINKAGE	MD ≤4 TD ≤2	120°C ± 2°C, 15min
吸水性(%) WATER ABSORPTION	< 0.1	24h, 20°C
介电常数(%) DIELECTRIC CONSTANT	2.2	1kHz, 23°C ± 2°C
损耗角正切(×10 <sup>-4</sup> ) DISSIPATION FACTOR	≤ 2.0	1kHz, 23°C ± 2°C
绝缘电阻(MΩ · μF) INSULATION RESISTANCE	≥100,000	
平均耐电压(VDC/μm) BREAK DOWN VOLTAGE	> 250 (≤5.0 μm) > 300 (> 5.0 μm)	
自愈点(PCS/m <sup>2</sup> ) NUMBER OF PINHOLES	≤ 2	At 100 VDC/μm