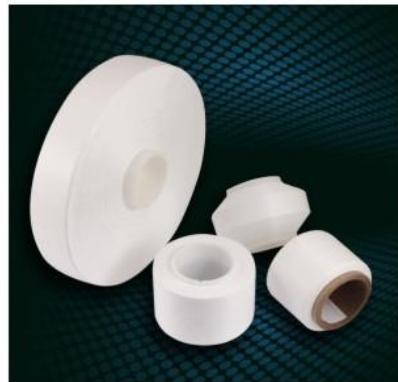


技术规范 Datasheet V4.3

FUTUREWAY®LD-PTFE Film & Tape, Low density

FUTUREWAY®LD-PTFE 低密度聚四氟乙烯薄膜带是专为微波同轴电缆、高速数据缆等设计的具有低介电常数(1.3-1.4)、抗压、快速弹性恢复和较高的抗拉强度等特性的低密度膨体纯 PTFE 薄膜带。FUTUREWAY®低密度聚四氟乙烯薄膜带除了具有众所周知电、热和化学优秀特性外，本公司主要对材料的衰减、额定损耗、强度、热稳定性、尺寸精度等进行改进，使其更适合于微波高频、稳相、低损耗、高速数据通信等高性能电缆上的应用。

FUTUREWAY®LD-PTFE, low density (LD) PTFE film & tape is an expanded, low density, pure PTFE designed to achieve low dielectric constant(1.3-1.4), crush resistance, fast elastic recovery, and high tensile strength for microwave and coaxial cable ,high data rate copper cable applications. Besides excellent well-known electrical, thermal and chemical properties, FUTUREWAY® LD-PTFE tape provides improved low attenuation and low ration loss for high performance cables to handle microwave energy in high frequency (GHz) range.



1. 材料 Material

- ❖ 聚四氟乙烯 PTFE (Polytetrafluoroethylene)
- ❖ 标准色和客户指定色 Standard

2. 型号规格 Type

名称 Name	型号(密度 厚度 mil*宽度 mm) Type (Density Thickness*width)	密度及公差(g/cm ³) Density & Tolerance	分切宽度 公差 mm Width & Tolerance	颜色 Color
LD-PTFE	F07 (02~10) * (2~150)	0.7±0.05	±0.2	本色 Natural

例：“LD-PTFE F0703*6”，表示密度为 0.7g/cm³、厚度为 3mil、宽度为 6mm 的低密度聚四氟乙烯带。e.g.:“LD-PTFE F0703*6”,means Low density PTFE tape, density 0.7g/cm³,thickness 3mil,width 6mm.

3. 性能指标典型值 Typical Properties (Density 0.7g/cm³)

厚度 Thickness	厚度 Thickness	厚度公差 Tolerance	纵向 Longitudinal direction			横向 Transversal direction
			抗拉强度 (Mpa) Tensile strength	断裂伸长率 (%) Elongation at break	收缩率 Shrinkage (%) (125°C/6hour)	
(mil)	(mm)	(μm)				
2	0.051	±5	10--20	>100%	20%-45%	0.5--1.5
3	0.076	±5	10--20	>100%	20%-45%	0.5--1.5
4	0.102	±8	10--20	>100%	20%-45%	0.5--1.5
5	0.127	±10	10--20	>100%	20%-45%	0.5--1.5
6	0.152	±10	10--20	>100%	20%-45%	0.5--1.5
8	0.203	±10	10--20	>100%	20%-45%	0.5--1.5
10	0.254	±10	10--20	>100%	20%-45%	0.5--1.5

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4. 包装 Packaging

类型 Type	卷芯内孔 mm Core Inner-Φ	卷芯长度 mm Core Length	带卷外径 mm Roll Outer-Φ	带卷侧面公差 Front side of roll, tolerance	备注 Remarks
带盘 pads	76.2	带宽 Film width	150~350	±2mm	
卷团 Parallel winding	76.6	100	100~250	±2mm	无侧板 Without flanges

5. 储存及使用 Storage & Handling

类似于大部分其它的材料，PTFE 材料具有记忆性，它会使得未烧结 PTFE 带恢复到原始形态，尤其对于延伸带更为突出，延伸带总是试图恢复到原来的密度。PTFE 延伸带的储存环节非常重要，要求处于低温、清洁、干燥的环境内，理想的储存环境温度应始终低于 19°C。

Like many other materials, PTFE has a “memory” which will cause the unsintered tape to try and recover its original shape. This is particularly an issue with expanded tapes, which try to retract back to their original density. It is very important therefore to store the material in a cool, clean & dry environment where the temperature should ideally stay under 19°C at all times.