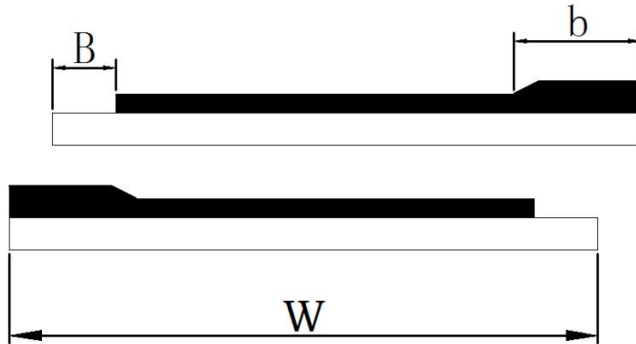




## Capacitor Grade Metallised Plastic Film

One side metallization film with Zinc-Aluminum with heavy edge (Single Margin)



Base film	Polypropylene	polyester
Normal thickness	2.0 μm ~ 12.0 μm	1.9 μm ~ 12.0 μm
Margin type	Single	
Coating metal	Zinc-Aluminum alloy	
Coating side	Single	
Edge structure	Heavy edge	

### Square resistance

加厚区方阻 Reinforced resistance	非加厚区方阻 Normal resistance
(2~4) Ω / □	(6~9) Ω / □
(1~3) Ω / □	(4~6) Ω / □
(1~3) Ω / □	(12~18) Ω / □
(2~4) Ω / □	(17~23) Ω / □

### Normal film Width and Margin

宽度(W) Width (mm)	留边量(B) Margin (mm)	宽度(W) Width (mm)	留边量(B) Margin (mm)	宽度(W) Width (mm)	留边量(B) Margin (mm)
7	0.5/1.5	37.5	2.0/2.5	70	2.5
9	1.5	40	2.5	75	2.0/2.5
10	1.0/1.5	42.5	2.5	80	2.5
14	1.0	43	2.0	85	2.5
19	1.5	45	2.0	90	2.0/2.5
21	1.5/2.0	50	2.0/2.5	95	2.5
25	2.5	55	2.5	100	2.0/2.5
26	1.5/2.0	60	2.0/2.5	120	2.5
30	2.0/2.5	62.5	2.5	110	2.0
35	2.5	65	2.5	125	2.0/2.5/5.0

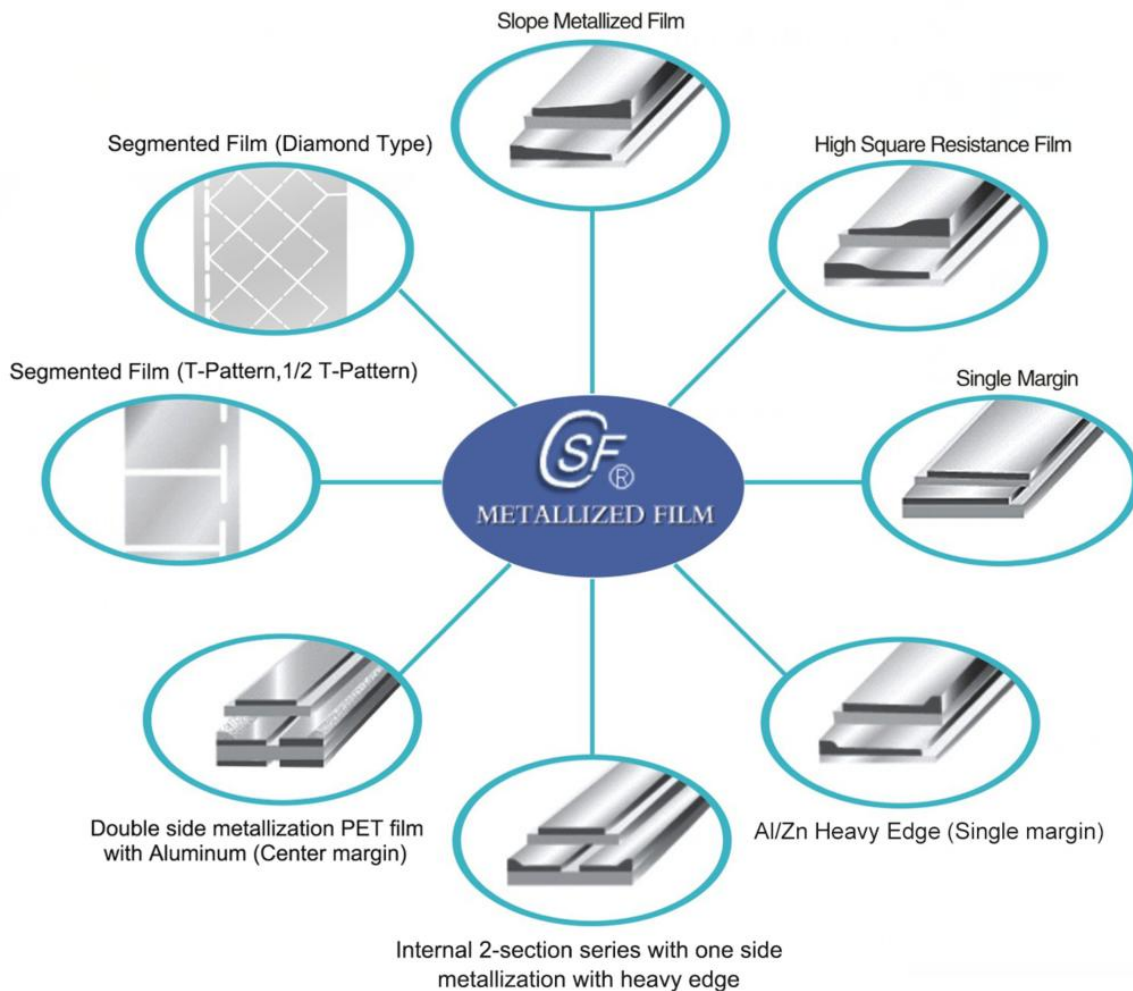
**Note:** If customer needs other resistance, film width or margin, please contact us.



Inside/outside core diameter:

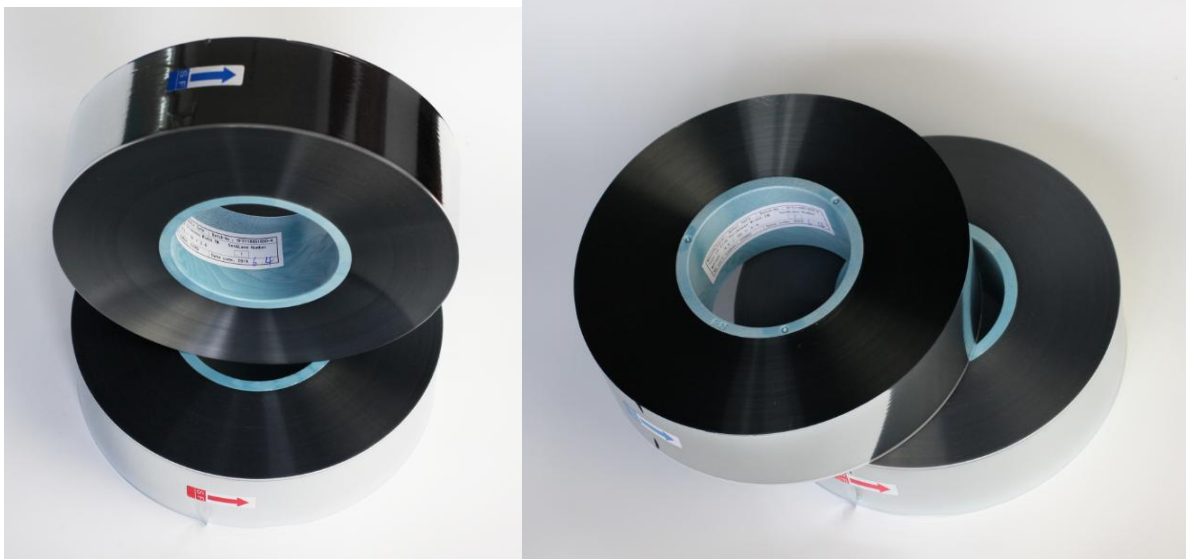
Inside core diameter/Tolerance		Outside core diameter/Tolerance	
75mm	+1/-0.5mm	175	±25mm
		220	±20mm
		280	±20mm
		320	±20mm
Note: A pair tolerance of outside core diameter ≤2mm.			

Types of Metallized Layer:





## Capacitor grade metallised plastic film



Type and named of metallized film:

MPPHZn/AlH

类型代码  
Type code

5.8\*100\*2.5

规格尺寸  
Specification size

S

留边形式  
Margin type

Type code	Specification size	Margin type
M Metallized		
PP Polypropylene film	The first section: Thickness	
PET Polyester film	Unit: $\mu$ m	S Single margin
PPH High temperature OPP film	The second section: width	T Double margin
Zn Metal coating is Zinc	Unit: mm	M Middle margin
Al Metal coating is Aluminum	The third section: Margin width	R Internal three series
H Heavy edge	Unit: mm	V Internal four series
D Double side metallized		
F Segmented metallized film		



The representation method of film thickness is by adding a decimal point to the integral value of the film thickness or adding an English code (see the following table).

English code	Numerial number	English code	Numerial number
Negative tolerance		Positive tolerance	
B	-0.4	V	+0.1
C	-0.3	W	+0.2
D	-0.2	X	+0.3
E	-0.1	Y	+0.4
L	0	Z	+0.5

For example: 6D means thickness is 5.8 $\mu$ m, 2W means thickness is 2.2 $\mu$ m

## Specifications of Metallised polypropylene film:

Properties	Unit	Typical value
Density	g/cm <sup>3</sup>	0.905±0.005
Thickness	$\mu$ m	2.0 ~ 12
Tensile Strength	MD (MPa)	≥100
Elongation at Break	MD (%)	20~200
Elastic Modulus	MD (MPa)	2800
Heat Shrinkage	MD (%)	≤5 ( 120°C, 10min)
Wetting Tension	mN/m	38 (电晕处理面 Corona treated side)
Surface Roughness	$\mu$ m	0.08
Melting Point	°C	172
Volume Resistivity	$\Omega$ .m	>10 <sup>15</sup>
Break-down Voltage	V/ $\mu$ m	≥350 ( 23°C, DC )
Dielectric Constant		2.2 (20°C, 1KHz)
Dissipation Factor		≤4×10 <sup>-4</sup> (20°C, 1KHz )
RC	$\Omega$ F	≥5×10 <sup>4</sup>



**Specifications of Metallised polyester film:**

Properties	Unit	Typical value		
Density	g/cm <sup>3</sup>	1.4		
Thickness	μm	<5	5~12	≥12
Tensile Strength	MD (MPa)	≥84	≥108	≥120
Elongation at Break	MD (%)	≥22	≥33	≥44
Elastic Modulus	MD (MPa)	3500		
Break-down Voltage	V/μm	≥200 ( 23°C, DC )	≥250 ( 23°C, DC )	
Heat Shrinkage	MD (%)	≤2.5 ( 150°C, 10min)		
Surface Roughness	μm	0.095		
Melting Point	°C	256		
Volume Resistivity	Ω .m	> 10 <sup>15</sup>		
Dielectric Constant		3.2		
Dissipation Factor	-	≤60 × 10 <sup>-4</sup>		
RC	Ω F	≥1 × 10 <sup>4</sup>		

**Packing:**

- Film rolls are packed in plastic bags, vacuumed and put into desiccant for heat sealing.
- The Bags are marked with type labels, mark thickness width, free margin width and resistance.
- The bags are packed in carton cases.

The cartons are wrapped by wooden cases or reinforced carton.





## ■ Storage

- Metallized film should be stored in its original package with temperature 5 - 35°C and humidity less than 85%RH before using.
- Metallized layer is easily oxidized when exposure to moisture. Therefore, the film should be used as soon as possible when opened.
- The recommended temperature is 15 -25°C with humidity less than 60%RH after opening
- With original sealed package, and stored as mentioned above, the storage time can be as following:

Al metallized film: 12 months from the delivery date. Al/Zn Alloy metallized film: As zinc is quite unstable, the storage period (from delivery date) depends on the resistance of the film:

$\leq 10 \Omega / \square$ : 6 months

10 ~ 30  $\Omega / \square$ : 3 months

$> 30 \Omega / \square$ : 1month