



#### **Safe Film- Metallized Polypropylene Zinc-Aluminum Film**

Feature	By adopting the design of electrician homo-polypropylene with ultra-high purity, the film is made by biaxial extended through a flat membrane process. It features good thickness and uniformity and high mechanical strength. The wended capacitors take on the characteristics of low dielectric dissipation and high insulation resistance.					
Application scope	M-PP: Mainly for Metallized film capacitors					
Technical Feature (Typical value)	Tensile strength	MD	Mpa	181.1	Extension Rate:100%/min @23°C, 50% r.h..	
		TD	Mpa	281.2		
	Elongation at break	MD	%	183.9		
		TD	%	65.7		
	Thermal Shrinkage Rate	MD	%	3.5	15 min @ 120°C	
		TD	%	0.3		
	Wetting tension		mN/m	38	Corona treatment surface	
	Surface Roughness		μm	R <sub>a</sub> 0.1/0.1 R <sub>z</sub> 0.78/0.76 R <sub>m</sub> 0.91/0.93	23°C	
	Breakdown Voltage (BDV) X		V/μm	576	at 23°C air	
	Relative Permittivity			2.2	50Hz or 1kHz @ 23°C	
Film Thickness Code	Volume Resistivity		Ω·m	3*10 <sup>15</sup>	23°C	
	Dielectric Dissipation Factor (Loss Tangent)			2.6*10 <sup>-4</sup>	50Hz or 1kHz @23°C	
	Reference Specification: IEC60674-2 Values above are reference only, not for contracting. Note: Uncorona-treated for Type SPP					
	The nominal film thickness is indicated by its central value (integer value, e.g. 5,6,7 the first figure after decimal or its codes. The nominal film thickness of Topmay is that of the Mechanical Method Value (MMV) under 10 layers testing.					
	Number	Letter	Number	Letter		
	-0.4	B	0.1	V		
	-0.3	C	0.2	W		
	-0.2	D	0.3	X		
	-0.1	E	0.4	Y		
	0	L	0.5	Z		
8D indicates 7.8μm in MMV; thickness; 12X indicates 12.3μm. Note: The film of thickness 5E 6E 7E 8D 9D and 10D etc. are recommended.						
8D indicates 7.8μm in MMV; thickness; 12X indicates 12.3μm. Note: The film of thickness 5E 6E 7E 8D 9D and 10D etc. are recommended.	Thickness	WMV	μm	2.8	3.7 4.7 5.6 6.6 7.5 9 9.5 11.5	
		MMV	μm	3	3.9 4.9 5.9 6.9 7.8 9 9.8 11.8	
	Thickness Tolerance	Average	%	±3		
		Individual Value	%	±9	±7 ±5	
	Finished Film Roll Width		mm	500 ~ 620		
	Inner Diameter		mm	76.2 ~ 152.4		
	Net Weight		kg	62 ~ 80		