TESLIN®
Enabling Substrate Technology from PPG

Electrostatic Dissipation (ESD) Testing

(June 2007) Independent laboratory test results reveal that printed *Teslin*® substrate affords faster static decay, increases productivity in die cutting and personalization and is static dissipative.

Static Decay		
Substrate	**Static Decay Time at 12% RH (Seconds)**	**Static Decay Time at 50% RH (Seconds)**
Teslin	23.4	0.05
PVC	Does not decay	Does not decay
PET	Does not decay	Does not decay
PC	Does not decay	Does not decay
Per MIL-STD-3010 specification, acceptable static decay materials should exhibit static decay time of < 0.50 seconds when conditioned at 50% RH		

***Teslin* Substrate vs. PVC and PC**	
Card Construction	**Static Decay Time at 50% RH (Seconds)**
Teslin/PET	0.11
Teslin/PVC (with magstripe)	0.02
All PVC	6.2
All PC	Does not decay

Surface Resistivity*		
Substrate	**Average at 12% RH (Ohms/square)**	**Average at 50% RH (Ohms/square)**
Teslin	7.87×10^{12}	5.32×10^{10}
PVC	5.52×10^{13}	4.93×10^{13}
PET	$> 1 \times 10^{15}$	7.97×10^{13}
PC	4.8×10^{14}	5.5×10^{14}
Per EIA-541, between 1×10^{5} & 1×10^{12} Ohms/square is static dissipative		

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