# Static Shielding Bag





### **Features**

# RoHS Compliant

- Metal "Faraday cage" layer shields products from electric energy inside and prevents static build-up
- · Four layer protection guards against charges inside and out
- · Semi transparent for easy content identification
- Surface resistance of 10<sup>8</sup>~10<sup>11</sup>Ω
- Conforms to EIA 625, EIA 541, ANSI/ESD S-20.20
- · Custom sizes and print available on request
- Suitable for packing electronic products which are sensitive to static, eg PCB's, Electronic Components etc

#### Construction

Static shielding bags are constructed in four layers, consisting of a static dissipative polyester outer layer and a static dissipative polyethylene inner layer with a centre metallised shield layer.

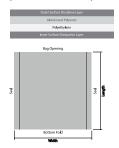
Our bags are manufactured from industry approved polyester and polyethelene laminates. The polyester dielectric works with the metal layer to provide a Faraday effect, the metal layer preventing penetration from damaging electrostatic fields. The specially processed polyethelene keeps tribocharging to a minimum.

#### Configuration(s)

Our bags are available in custom sizes or in several industry standard sizes. Bags are offered in a 2-seal configuration and bottom fold, with our standard flexographically printed artwork. Please note any bags that are longer than 24" will have a 3rd seal along the bottom edge. Bags can also be personalised with company logo on any bespoke orders.

#### Standard Bag Artwork

Our static shielding bags are produced with the following sample artwork as standard. For further information on bespoke/printed orders, please contact one of our sales team. Please note there is a MOQ of 20,000 bags on all printed bags.





### **Specifications**

Material : APET/CPE
Total Thickness : 0.075mm

Item		Typical Value	Test Method
Thickness		±10%	MIL-STD-3010 1003
Tensile breaking force	TD	≥40N/25mm	ASTM D882
	MD	≥40N/25mm	ASTM D882
Elongation at break	TD	≥20%	ASTM D882
	MD	≥20%	ASTM D882
Seal Strength		≥30N/15mm	MIL-PRF-81705E

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# Static Shielding Bag



Item	Typical Value	Test Method
Puncture Resistance	≥35N	FTMS 101C Method 2065.1
Surface Resistance (Inner)	10 <sup>8</sup> -10 <sup>11</sup> Ω	ANSI/ESD STM11.11
Surface Resistance (Outer)	10 <sup>8</sup> -10 <sup>11</sup> Ω	ANSI/ESD STM11.11
Static Shielding (out sourced testing)	<20nJ	ANSI/ESD STM11.31
Static Decay (out sourced testing)	<2s	MIL-STD-3010C
Friction Voltage	<100V	ESD ADV11.2
Light Transmission	45% - 55%	ASTM D1003

### **Test Conditions**

The following results were taken under the following environmental test conditions: Temperature: 23°C / Humidity: 43%

Item:	Test Standard:	Result:	
Film Thickness	Micron Meter	3mils 75 micron	
Metal Layer Optical Transmission	ASTM D1003	40% ±5% optical density	
Surface Resistivity	IEC 61340-2-3	<10 <sup>10</sup> Ω/sq	
Time for static removal	FTMS 101B Method 4046 - 5000-0V	<0.03 Sec	
Static Shielding - ESD-STM-11.31 @12% R.H.		<30 nJ	
Static Shielding - Capacitive Probe	EIA 541	<25V	
Friction Static	E1A541 Appendix C Avg.	TriboelectricNanocolombs Quartz +0.10 PTFE -0.09	
Capacitance Release	E1A541 Voltage Difference	<20V	
Anti-erosion	FTMS 101C Method 3005	No visible spots	
Tensile Strength	ASTM D882-91, Method A	MD 6530 psi TD 5800 psi	
Tear Initiation	ASTM D1004 -94-Notched	MD 2.5 lbs./in TD 2.0 lbs	
Puncture Resistance	ASTM D3420	>100 PSI	
Tear Resistance	ASTM D882	>8 lbs./in	
Burst Strength	FTMS 101 C Method 2065.1	50 psi Nominal	
Heat Seal Temperature	-	250 - 375°F	
Heat Seal Pressure	-	30-70 PSI	
Heat Seal Strength	(D1876-93) Vertrod bar sealer/heat	>12 lbs/in width (room temperature)	
Breaking Elongation Rate	ASTM D882-91 Method A	MD 80% TD 85%	
Appearance	GB/96-04-10	No delamination, burst seal, wrinkle, warp, break, foreign particle adherence, air bubble beyond sealing ф <3mm	



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#### **Test Conclusion**

The shielding bag is tested accordance with the relevant test standard & requirements.

Test Item:	Test Method:	Measured Equipment(s):	MDL:
Lead (Pb)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2mg/kg
Cadmium (Cd)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2mg/kg
Mercury (Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis	2mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5mg/kg

## **Part Number Table**

Description	Part Number
Static Shielding Bag, 127mm×660.4mm, PK100	010-0012

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