

**RoHS  
Compliant**

## Features

- 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  $10^8 \sim 10^{11} \Omega$
- Conforms to EIA 625, EIA 541, ANSI/ESD S-20.20
- 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.

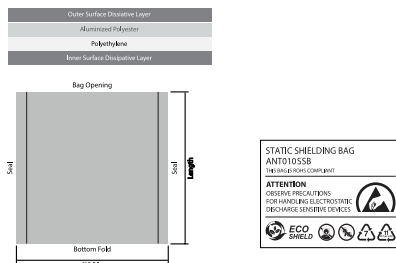
Our bags are manufactured from industry approved polyester and polyethelene laminates. The polyester dielectric works with the metal layer to provide a Faraday effect, the metal layer preventing penetration from damaging electrostatic fields. The specially processed polyethelene keeps tribocharging to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



## 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	<math>10^{10}</math> Ω/sq
Time for static removal	FTMS 101B Method 4046 - 5000-0V	<math>0.03</math> Sec
Static Shielding - Energy Penetration	ESD-STM-11.31 @12% R.H.	<math>30</math> nJ
Static Shielding - Capacitive Probe	EIA 541	<math>25</math>V

# Static Shielding Bag

Item	Test Standard	Result
Friction Static	E1A541 Appendix C Avg.	Triboelectric Nanocolombs 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 $\varnothing \leq 3\text{mm}$

### 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, 117.8mm×406mm, PK100	MC0100021

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