

# **PACKAGING**

# Bag 1000 Metal-In Static Shielding Bags

MPK-1000 Metal-in Static Shielding Bags are transparent, metalized static shielding bags that provide a safe package for your ESD sensitive products. These bags are a four layer construction incorporating a polyester dielectric and metal layer to provide Faraday effect shielding of ESD and fields. Tribocharging is minimized by the specially processed polyethylene.

# **STANDARDS**

Meets electrical and physical requirements of MIL-PRF-81705 Type III, EIA 541, EIA 625, MIL-HDBK 263, MIL-STD-1686 and EOS/ESD Standards.

### **SPECIFICATIONS**

Physical Properties	Typical Values	
Thickness Light Transmission Tensile Strength Seal Strength Puncure Resistance Puncure Resistance MVTR	3.1 mils. Nominal 40% ≤ 4,000 psi Pass ≤ 99 ≤ 22 n/a	MP005 Tobias ASTM D882 MIL-PRF-81705 ASTM D-7192 (N) ASTM D-7192 (lbf) ASTM F-1249 g/(100in2 .day)
Heat Sealing Conditions Temperature Time Pressure Outgassing Non-corrosive	250°F - 375 °F 0.5 - 3.5 seconds 30 - 70 psi Pass Pass	ASTM E595 FTMS 101 MTH 3005
Electrical Propeties Surface resistivity / Resistance Interior	ASTM D257 < 10e <sup>12</sup> ohms	or ANSI/ESD STM 11.11 or < 10e <sup>11</sup> ohms

 $< 10e^{12}$  ohms

< 0.05 segundos

0.09 nC/sq. in.

0.01 nC/sa. in.

100 ohms

< 30 volts

< 10 nJ



## **Material Structure**

Metal-in flat and zipper-closure static shield bags are made from industry-approved polyester/aluminum/polyethylene laminate. The polyester dielectric in concert with the metal layer provide Faraday Effect shielding ESD.

The metal layer prevents penetration of damaging electrostatic fields. Tribochraging is minimized by the specially processed polyethylene.

# Exterior of bag Dissipative Polimer Metal Polyolefin

 $\mbox{^*}\mbox{Available}$  flat with open top or with a zipper, adhesive tape or other style closure.

Interior of bag



Exterior

Static Shielding

Static Shielding

Charge Generation

Static Decay

Teflon

Quartz

Metal





### STANDARD PRINT

or  $< 10e^{11}$  ohms

EOS/ESD S11.31

EIA 541. MIL-PRF-81705

FTMS 101 MTD 4046

Modified Incline Plane



Storage conditions:

\*Do not expose the product to temperatures above 40  $^{\circ}$  C.

\*Do not place at a height of 2 meters.

\*Avoid direct exposure of the product to sunlight for longer times to 24 hours.

