

# **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

250°F - 375 °F Temperature 0.5 - 3.5 seconds Time 30 - 70 psi Pressure Pass

Outgassing Pass Non-corrosive

## Flectrical Propeties

Licetifical Fropetics		
Surface resistivity / Resistance	ASTM D257	or ANSI/ESD STM 11.11
Interior	< 10e <sup>12</sup> ohms	or < 10e <sup>11</sup> ohms
Exterior	< 10e <sup>12</sup> ohms	or < 10e <sup>11</sup> ohms
Metal	100 ohms	
Static Shielding	< 30 volts	EIA 541, MIL-PRF-81705
Static Shielding	< 10 nJ	EOS/ESD S11.31
Static Decay	< 0.05 segundos	FTMS 101 MTD 4046
Charge Generation		

0.09 nC/sq. in.

0.01 nC/sa. in.



## **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 laver 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 --- Polyolefin

## Interior of bag

\*Available flat with open top or with a zipper, adhesive tape or other style closure.



Teflon

Quartz





#### STANDARD PRINT

ASTM E595

FTMS 101 MTH 3005

Modified Incline Plane



These data are based on information we believe correct; our offered guarantee is 12 months in respect of the application and use of the product, since the conditions and methods of use are beyond control of the company. Before the final use of the product, we recommend the user to perform a detailed assessment of the same through the implementation and use of significant samples. Users are responsible for checking the validity of the information provided. Storage conditions:

\*Do not expose the product to temperatures above 40 ° C.

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



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