

---

# Total tech

## ESD & Clean Room Products

### **Technical Specifications**

ESD Transparent Static Shielding Bag Film

Bubble sheet.

Provide EMI/RFI shielding and ESD control for PCB assemblies.

Conductive buried aluminum shield layer between two polymeric plastic layers; exposed surfaces

static dissipative. Contains no Amines, Amides or N-octanoic acid. Polycarbonate compatible

.

### **Construction/Composition:**

1. Static dissipative layer
2. Transparent metalized polyester
3. Polyethylene
4. Permanent static dissipative layer

### **Physical Properties:**

-----  
-----  
Total Thickness: 3.1 mils (80 micron)

Tensile Strength (ASTM D882-91, Method A): MD: 5800psi TD: 6600psi

Tear Strength (D 1004-66-Notched): MD: 2.5lbs TD: 2.0lbs

Elongation (ASTM D882-91, Method A): MD: 80% TD: 85%

Burst Strength: (FTMS 101 C, Method 2007 la): 50psi

Puncture Strength (FTMS 101C, Method 2065.1): >12lbs

(Heat Seal Strength (D1876-93): >14lbs/in (room temperature

MVTR (ASTM F-1249@100°F/100sq in/24hrs): 0.3gms - nominal

Light Transmission (ASTM D-1003-92): 40% +/- 5%

**Electrical Properties:**

-----  
-----  
EMI Shielding (Mil-PRF-81705C): >10 dB between 1 & 10 GHZ

**Resistivity:**

Conductive Metal Layer (ASTM D-257): <50 ohms/sq. ( $5 \times 10^1$  ohm/sq)

Surface Resistivity (ASTM D-257): <10110hms/sq(1090hm/sq average).

**Pink anti static layer**

Surface Resistivity <  $10^{10}$  ohm/sq.

Static Decay < 0.03 seconds.

Bubble sheet Resistivity <  $10^{11}$  ohm/sq.

Bubble diameter 10mm, thickness 3mm.

Capacitive Probe Test (High Voltage Discharge EIA-Std541/Appendix E-1KV): <30 volts

Static Decay (FTMS 101C, Method 4046.1, 5000 to 0 Volts)

seconds 0.03>

Charge Generation - nominal (Modified incline plane average nC/sq.in.): Teflon: - 0.09

Quartz: +0.10