

## ESD File Bag

### ◆ Product Description

ESD file bags are a type of document storage solution specifically designed for electrostatically sensitive environments. Made of permanent anti-static materials, they can effectively prevent the accumulation of static electricity and protect sensitive electronic components and production environments from electrostatic hazards.

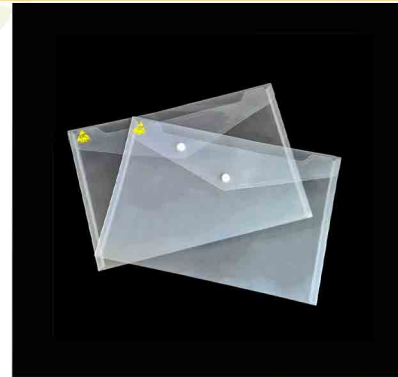
- Permanent Anti-static Performance
- High Transparency and Durability
- Suitable for Clean Environments
- Wide Compatibility
- Improve Production Efficiency and Product Quality

### ◆ Product Structure

- ESD Snap-Fastener File Bags adopt a three-layer composite structure and a precision snap-fastener system. The outer layer is a PI (Polyimide) conductive layer processed via a self-developed electroless silver plating process; the middle layer is a 150D base material; the inner layer is a graphene-doped LDPE (Low-Density Polyethylene) heat-sealing layer that complies with corporate standards, the snap fasteners use custom nickel-plated metal four-piece snap fasteners.

### ◆ Typical Applications

- ESD snap-fastener file bags are suitable for protecting precision components in multiple scenarios: In the EPA (Electrostatic Protected Area) of electronic manufacturing workshops, workers use them to pick and place PCB (Printed Circuit Board) boards—the outer layer shields against static electricity, the middle layer resists impact, and the snap fasteners are durable for repeated opening and closing; in semiconductor cleanrooms for wafer storage, the inner layer prevents static electricity and isolates moisture, providing all-round protection for the safety of components.



### ◆ Typical Product Data and Physical Properties

Material: Anti-static PP (Polypropylene)  
 Color: Transparent  
 Product Thickness: 0.16mm (millimeter)  
 Opening Style: Snap-fastener Type  
 Resistance Value:  $10E5-10E9\Omega$   
 Charge Decay Time:  $\leq 1$  second

#### Availability:

Item#	Color	size
1.3.11.01.0005	Transparent	A4

### ◆ Technical and Application Assistance

HORB provides a technical hotline to answer your technical and application related questions.

#### ◆ Note:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. HORB data for reference only.

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