

**RoHS  
Compliant**



## Description

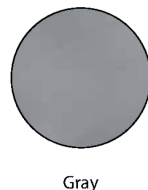
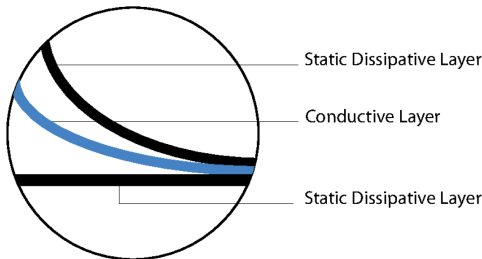
Anti-static matting should be laid out in the workshops or advanced laboratories for microelectronic industries such as electronic semi-conductor devices, computers, electronic communication equipment and integrated circuits etc.

## Features

- Great value ESD Bench Matting with grounding cord and two 10mm studs to two corners
- Made from anti-static (conductive) and static-dissipative materials with synthetic rubber
- 3mm thick double-layer structure
- Surface layer is a 1.25mm thick static-dissipative layer
- Middle layer is a 0.5mm conductive layer
- Bottom layer is a 1.25mm thick static-dissipative layer
- Blue and Grey colours also available

## Construction

## Colours / Finish



Gray

## Grounding

Sufficient ground cords should be used to reliably meet EN 61340-5-1 Table 3 less than  $1 \times 10^9 \Omega$  for working surfaces. Industry recommendation is that continuous runs of ESD matting should be grounded at 10ft intervals to allow proper charge decay rates. Each individual ESD mat should be grounded with ground snaps located no further than five feet from either end.

## Cleaning

Please note that contact between the matting surface and any acid or alkali solvent is strictly prohibited (such as Benzene, Alcohol etc), this will result in the antistatic performance wearing away. If cleaning is required, the matting may be wiped with a cloth coated in a neutral solution (such as water).

## Cutting Tolerances

Width + 6mm, Length + 6mm every linear foot of running material.

## Guidance On Use

Matting materials have a tendency to shrink slightly when first unrolled. In applications where length is critical, allow the material to relax for at least 4 hours before cutting to size. Matting should always be trimmed with a sharp knife or razor blade.

|                               | Test Method    | Value                                     | Unit               |
|-------------------------------|----------------|-------------------------------------------|--------------------|
| Surface Resistance / $R_{TG}$ | SJ/T10694-2004 | $1 \times 10^6 \leq R \leq 1 \times 10^9$ | $\Omega$           |
| Bottom Resistance / $R_{TT}$  | SJ/T10694-2004 | $1 \times 10^6 \leq R \leq 1 \times 10^9$ | $\Omega$           |
| Volume Resistance             | GB/T14437-97   | $1 \times 10^5 \leq R \leq 1 \times 10^8$ | $\Omega$           |
| Thickness                     | YY-1001        | Permissible Tolerance +0.1                | mm                 |
| Temperature Resistance        | YY-1001        | 180 (Instantaneous Temp)                  | $^{\circ}\text{C}$ |
| Temperature                   | N/A            | 20-26                                     | $^{\circ}\text{C}$ |
| Relative Humidity             | N/A            | 40-65                                     | %                  |

$R_{TG}$  is the resistance from one point on the mat's surface to the mat's ground point, and is the fundamental electrical test for a mat. A proper  $R_{TG}$  insures that a mat can conduct charge from a point on the surface to the mat ground point. The guideline in ESD STM-4.1 for  $R_{TG}$  is  $1 \times 10^6$  to  $1 \times 10^9 \Omega$ . ANSI/ESD S-20.20 has an upper limit of  $<1 \times 10^9 \Omega$ .

$R_{TT}$  is the resistance from one point on the mat's surface to another point. A proper  $R_{TT}$  insures the consistency of the mat's resistance properties. The ESD STM-4.1 guideline for  $R_{TT}$  is  $>1 \times 10^6 \Omega$ .

## Straight Earth Lead



### Description

One end supplied with a single ring terminal the other end features a 10mm snap and 2mm x 4mm banana sockets.

### Features

- Special conductive wire
- Each straight cord contains 10 special conductive wires
- Outer covered with Non-Conductive PU
- Length: 10ft
- Diameter of cord: 2.4mm
- Resistivity:  $1\text{M}\Omega \pm 10\%$

## Part Number Table

| Description                                            | Part Number |
|--------------------------------------------------------|-------------|
| ESD Bench Mat, 3 Layer, Smooth Finish, Grey, 2ft x 4ft | 082-0211MP  |

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