ESD Bench Mat





RoHS Compliant

Description

Anti-static matting should be laid out in the workshops or advanced laboratories for microelectronic industries such as electronic semi-conduct devices, electronic 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
- 2mm thick double-layer structure
- Surface layer is a 0.5mm thick static-dissipative layer
- · Bottom layer is a 1.5mm conductive layer
- · Blue and Grey colours also available upon request

Construction Colours / Finish Static Dissipative Layer Conductive Layer 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.

Newark.com/multicomp-pro Farnell.com/multicomp-pro sg.element14.com/b/multicomp-pro



ESD Bench Mat



	Test Method	Value	Unit
Surface Resistance / Rтс	SJ/T10694-2004	1 × 10 ⁶ ≤ R ≤ 1 × 10 ⁹	Ω
Bottom Resistance / RTT	SJ/T10694-2004	$1 \times 10^3 \le R \le 1 \times 10^6$	Ω
Volume Resistance	GB/T14437-97	1 × 10 ⁵ ≤ R ≤ 1 × 10 ⁸	Ω
Thickness	YY-1001	Permissable Tolerance +0.1	mm
Temperature Resistance	YY-1001	180 (Instantaneous Temp)	°C
Temperature	N/A	20-26	°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 1×10^{9} to 1×10^{9} Ω . ANSI/ESD S-20.20 has an upper limit of $<1\times10^{9}$ Ω .

RTT is the resistance from one point on the mat's surface to another point. A proper RTT insures the consistency of the mat's resistance properties. The ESD STM-4.1 guideline for RTT is >1×10⁶ Ω .

Straight Earth Lead



Description

One end supplied with a single ring terminal the other end features a 10mm snap and $2\text{mm} \times 4\text{mm}$ 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: 1MΩ ±10%

Part Number Table

Description	Part Number
ESD Bench Mat, 2 Layer, Smooth Finish, Grey 2ft × 3ft	082-0207MP

Important Notice: This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Newark.com/multicomp-pro Farnell.com/multicomp-pro sg.element14.com/b/multicomp-pro

