

# Nanotech Ultra Elite EMI Armour Sheets

## Graphene Powered Silver-Coated Copper Sheets for EMI/RFI Shielding and Heat Management

### Product Overview

Nanotech Ultra Elite EMI Armour is a thin, flexible, scratch resistant and lightweight conductive polyester sheet produced based on Nanotech Premium Graphene and silver coated copper flakes. It offers superior EMI shielding properties along with excellent thermal conductivity, mechanical flexibility, structural integrity and corrosion resistivity. Unlike conventional metal foils and meshes, Nanotech Ultra Elite EMI Armour sheets are mechanically robust and flexible, corrosion resistant and offer many processing advantages.

The light and flexible sheets are designed to contain or block internal and external electromagnetic interferences. We offer the shielding sheets in various sizes to meet the diverse requirements for EMI shielding applications. The material is flexible and can be cut into customizable shapes. With excellent thermal conductivity, this product can also be used to dissipate heat from power electronics.

*\*All numbers listed in this sheet have been confirmed by third party testing.*

Item #: 905138	
Product Specifications*	
<b>Color</b>	Copper Red
<b>Thickness</b>	30 ± 3 µm
<b>Sheet size</b>	8" x 8" to 28" x 28"
<b>Electric Conductivity</b>	2400-2600 S/cm
<b>Thermal Conductivity</b>	4.1 ± 0.0205 W/(m·K)
<b>EMI Shielding Effectiveness</b>	~80 dB at 10 kHz -10 MHz, 95 dB at 90 MHz, 72 dB at 1 GHz, 65 dB at 5 GHz, 90 dB at 40 GHz (at 30 µm dry thickness)
<b>Specific density</b>	1.4 ± 0.05 g/cm <sup>3</sup>
<b>Substrate</b>	PET Plastic (100 µm)
<b>Operating Temperatures</b>	Up to 200 °C (1 hour exposure, freestanding film)

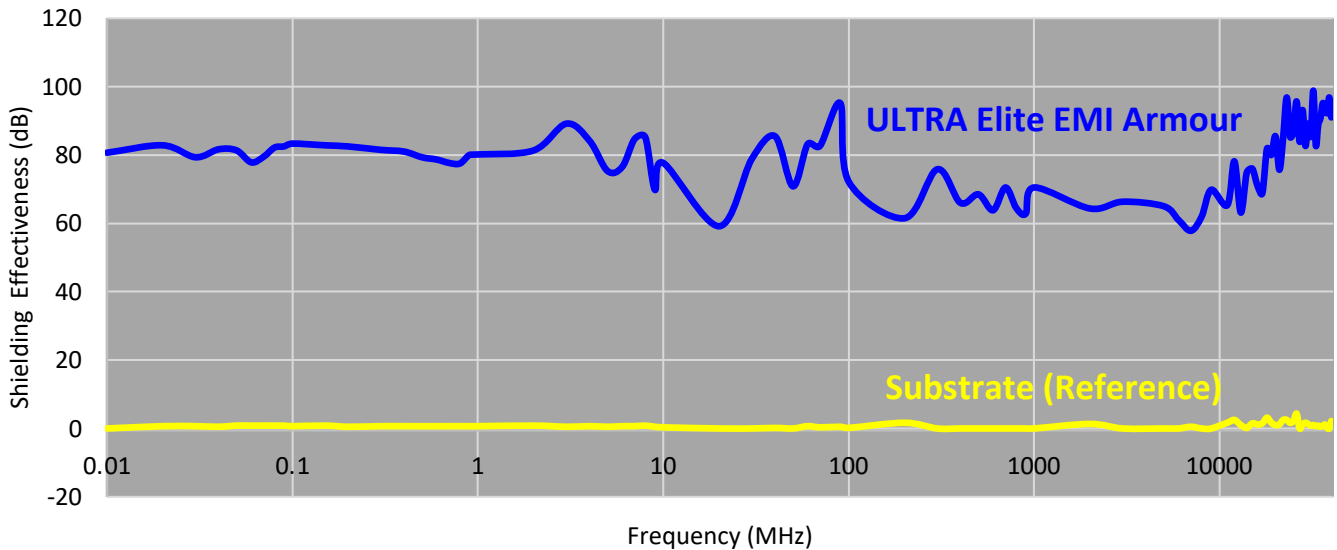
# Product Features

- Matte finish with high chemical and scratch resistance
- High electrical and thermal conductivity
- High EMI/RFI attenuation across a wide range of frequencies
- Flexible, thin, light and easy to trim
- RoHS compliant

# Applications

- EMI/RFI shielding
- Static charge dissipation
- Heat management
- Resistive heating
- Barrier

## Shielding Effectiveness/Signal Attenuation Data\* 30 µm thick sheet



\* Tested in compliance with IEEE Std. 299-2006 and MIL-STD-285 by a third party



### Disclaimer

*The information claimed is believed to be accurate. Nanotech Energy Inc. holds no guarantee to the accuracy of data and no liability in connection with damages when using the product.*

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### NANOTECH ENERGY

12100 Wilshire Blvd. | Suite 800 | Los Angeles, CA 90025 | 1 (800) 995-5491 | nanotechenergy.com