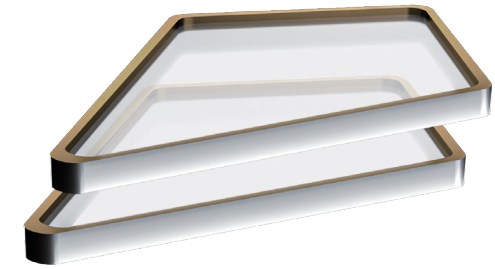
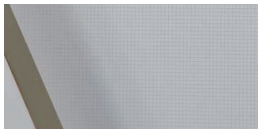
METAL MESH-BASED INFRARED TRANSPARENT EMI SHIELDING WINDOW

Metal mesh-based infrared transparent EMI shielding window of VOT exhibits frequency selection characteristics for electromagnetic waves while maintaining high transmittance in a specific band, enabling effective regulation of the reflection and transmission of electromagnetic waves. The semiconductor lithography process is applied to etch a grid with a specific line width and period. Through vacuum coating technology, a specific material is evaporated and deposited on the grid to form a metal mesh film with a specific structure on the material surface, thereby realizing efficient electromagnetic shielding for radar waves.





Technical Parameters

Product Name	Metal Mesh-Based Infrared Transparent EMI Shielding Window
Optical Window Substrate	Optical Glasses, Sapphire, ZnS, ZnSe
Component Size	Customizable
Metal Mesh Line Width	6-20μm
Metal Mesh Period	100-2000μm
Metal Mesh Shape	Square, Hexagon, Circle, etc.
Options of Metals	Au, Ag, Cu, Cr
Lithography Method	Laser Direct Writing (LDW)
Coating Method	Physical Vapor Deposition (PVD)
Material Characteristics	Metal mesh-based infrared transparent EMI shielding window achieves efficient infrared transmission and excellent electromagnetic shielding performance by optimizing structural parameters and manufacturing processes, which is suitable for various high-demand infrared optical systems.
Application Field	Attributed to its unique optical and electromagnetic properties, the EMI shielding window has extensive application prospects in multiple fields such as radar stealth, electromagnetic shielding, infrared imaging, communication systems, and high-performance optical windows. Shields infrared sensors from EMI in medical diagnostic devices and automated systems.

VITAL OPTICS TECHNOLOGY CO.,LTD.

400-6235308
www.votinfrared.com
sales@votinfrared.com

WeChat