

25.4mm Dia., 1mm Thick, Uncoated, ISP Optics AMTIR-1 Window | AM-W-25-1



AMTIR-1 Windows

Stock **#16-796** CLEARANCE **2 In Stock**

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1

+

€595⁰⁰

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Volume Pricing	
Qty 1+	€595,00 each
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Product Downloads

General

AM-W-25-1	Model Number:
Protective Window	Type:

Physical & Mechanical Properties

21.59	Clear Aperture CA (mm):
	Diameter (mm):

25.40 +0.00/-0.13	
Thickness (mm):	1.00 ±0.13
Parallelism (arcmin):	<3
Bevel:	Protective as needed
Clear Aperture (%):	85
Edges:	Fine Ground
Poisson's Ratio:	0.21
Young's Modulus (GPa):	21.2
Knoop Hardness (kg/mm²):	170.00

Optical Properties	
Coating:	Uncoated
Substrate: ☐	AMTIR-1 (Ge ₃₃ As ₁₂ Se ₅₅)
Index of Refraction (n _d):	2.519 @ 3µm 2.503 @ 8µm 2.490 @ 12µm
Surface Quality:	40-20
Wavelength Range (nm):	750 - 14000
Surface Flatness (P-V):	λ/10 @ 10.6µm

Material Properties	
Density (g/cm³):	4.43
Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):	12.6

Regulatory Compliance	
RoHS 2015:	Compliant
Certificate of Conformance:	View
Reach 240:	Compliant

Product Details

- Transmission from 750nm - 14µm
- Excellent Chemical Resistance to Acids
- Low Index of Refraction

ISP Optics AMTIR-1 (Amorphous Material Transmitting Infrared Radiation) Windows are constructed from a chalcogenide material, Ge₃₃As₁₂Se₅₅, and transmit infrared light from 750nm to 14µm. AMTIR-1 is water insoluble and has excellent chemical resistance to acids, enabling these windows to be used in harsh environments as protective windows. Compared to germanium windows, these windows have a lower index of refraction and do not experience thermal runaway, allowing for their use uncoated and in elevated temperatures up to 300°C. ISP Optics AMTIR-1 Windows are ideal for use in infrared imaging systems, non-contact temperature measurement systems, forward-looking infrared (FLIR) cameras, and low power infrared laser systems.

Technical Information



