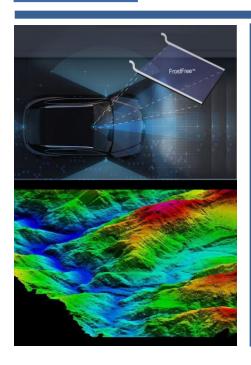


FrostFree™ EXTENDED-WAVELENGTH CONDUCTIVE COATINGS FOR LIDAR WINDOWS



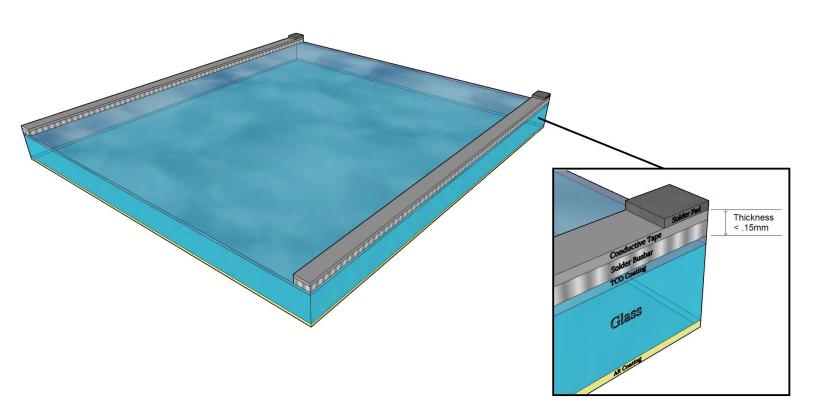
Key Features

- Unsurpassed transmittance in the NIR
- Highly durable coatings
- Various sheet resistivities available
- Uniform thermal management
- Available on a variety of substrates

Applications

- Automotive
- Aerospace
- · 3D mapping
- Agriculture

FrostFree™ Heater Window - Typical Features & Attributes



2721 Giffen Avenue, Santa Rosa CA 95407 • P +1-707-791-1650 or www.macthinfilms.com

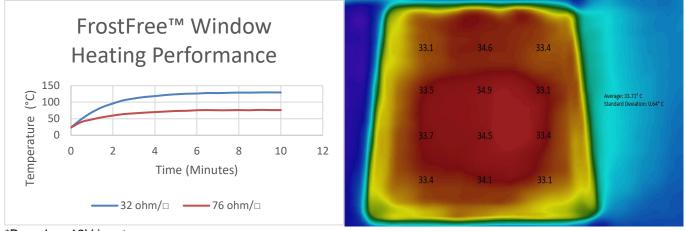
Copyright © 2014-2022 MAC Thin Films. Product specifications and descriptions in this document are subject to change without notice.



FrostFree™ EXTENDED-WAVELENGTH CONDUCTIVE COATINGS FOR LIDAR WINDOWS

	Transmittance at 900nm*				Transmittance at 1550nm*			
Angle (deg)	32 Ω/□ FrostFree™	32 Ω/□ ITO	76 Ω/□ FrostFree™	76 Ω/□ ITO	32 Ω/□ FrostFree™	32 Ω/□ ITO	76 Ω/□ FrostFree™	76 Ω/□ ITO
0	97.5%	96.6%	98.0%	97.6%	93.5%	92.3%	95.5%	94.6%
30	97.0%	96.1%	97.5%	97.1%	93.0%	89.5%	95.0%	94.3%
45	95.0%	94.4%	96.0%	95.5%	92.5%	84.6%	95.0%	92.6%
60	90.5%	89.5%	91.5%	90.5%	88.0%	74.9%	89.0%	86.0%

^{*}Using 2mm borosilicate glass, single beam pass



*Based on 12V input power

Coating Durability

Coating Type	49°C/98% RH Humidity	Abrasion	Salt Solubility	WOM (Weatherometer)	Salt Fog
Antireflective	28 Days	5,000 Steel Wool Rubs	28 Days	105 days	7 Days
FrostFree TM Heater	24 Hours	40 Eraser Rubs	24 Hours	N/A	N/A

2721 Giffen Avenue, Santa Rosa CA 95407 • P +1-707-791-1650 or www.macthinfilms.com

Copyright © 2014-2022 MAC Thin Films. Product specifications and descriptions in this document are subject to change without notice.