



TECHNICAL DATA SHEET

SHIELDING SOLUTIONS SHW-CF100-100 ELECTRICALLY CONDUCTIVE ITO COATED POLYESTER FILM – 100 Ω/\square

Product overview

SHW-CF100-100 is an electrically conductive optical film with excellent light transmission. It consists of a 175 micron heat stabilised polyester substrate coated with a thin layer of ITO (Indium doped Tin Oxide). It enables devices such as high resolution colour displays to be clearly viewed with minimal effect of colour balance and transmitted light whilst protecting them from electrostatic discharge (ESD). This film may also be used to prevent dangerous or nuisance charges (potentials) accumulating on transparent enclosures or viewing apertures.

Key features

- High visible light transmission / low reflection
- Uniform surface conductivity
- Very good high temperature / humidity stability
- Low thickness and flexibility facilitates fitting in existing display assemblies

Applications

- Static dissipative windows
- ESD protection for displays or other optical devices
- Transparent heating film for display demisting / de-icing
- Light covers / lenses used in explosive atmospheres (ATEX regulations)



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Material Properties	
Thickness	175 microns
Surface resistance	100 Ω/\square
Substrate	Polyester
Conductive coating	ITO
Visible light transmission	~80%
Maximum service temperature	85°C
Resistance to humidity - 85°C / 95% / 24 hours	Pass*
High temperature resistance - 150°C / 1 hour	Pass*
Dimensional stability - 150°C / 30 minutes	<0.25%
Linear defects (scratches) – maximum length / width	10mm / 25 microns
Circular / amorphous defects – maximum dimension	0.5mm
Maximum service temperature	85°C

*10% loss of surface conductivity

Note: The values shown on this data sheet are typical of this product and are not intended as for use as a specification. In any event we recommend that the material is fully evaluated for suitability in its intended application.



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