

EmiClare Ultra

EmiClare is a range of EMI shielded windows designed by Optical filters to maximise optical clarity without sacrificing EMI shielding performance.

Ultra are EmiClare windows made to order which offer excellent shielding effectiveness at both high and low frequencies.

Product format

EmiClare Ultra are bespoke fully laminated windows terminated with either a mesh extension or a silver busbar. Windows are made to order and can be supplied in a wide range of thicknesses in either glass, polycarbonate or acrylic substrates.

Additional filters for contrast enhancement, privacy, NIR control, NVG and a heater element can be included as part of the filter.

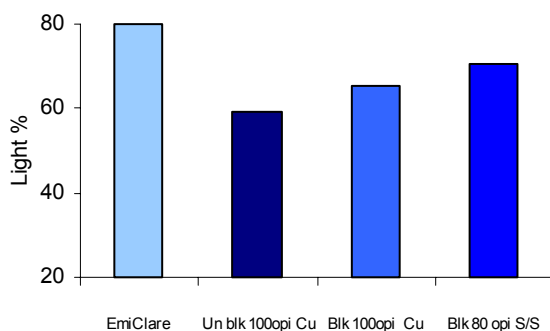
Polycarbonate Substrate Properties

- Optical grade polycarbonate.
- High impact resistance.
- UL94 HB flammability rating.
- High clarity non-glare or hard coated clear gloss front surface finish.
- Clear gloss hard coated rear surface.
- Chemical resistance to DIN 42 115.
- 3H pencil hardness scratch resistance.

Glass Substrate Properties

- Optical grade plain float glass (soda lime).
- Excellent scratch & chemical resistance.
- Good impact resistance which can be further improved by chemical tempering.
- High clarity non-glare etch or Multi-layer Anti - Reflective (MLAR) coatings.

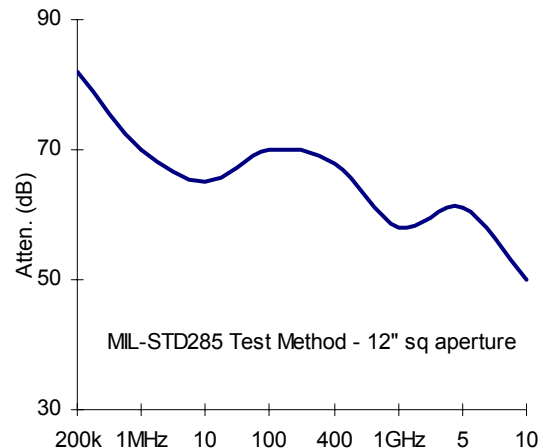
Optical properties



EmiClare mesh provides higher brightness and image quality. Actual light transmission of the fully laminated MLAR glass window at 500-550nm is 70-75%.

Shielding effectiveness

This graph is a guide to the typical shielding effectiveness of EmiClare mesh.



Termination

For the best shielding effectiveness termination is made directly to the extended mesh. Other terminations over the mesh are:

- Conductive gasket.
- Conductive tape.
- Conductive adhesive.
- Silver painted busbar.

Additional filters

EmiClare Ultra windows can be supplied with additional features:

- Circular polarisers for contrast enhancement and sunlight readability.
- Micro-louver privacy and view control blur filters to control viewing angles.
- Near Infra Red blocking filters to reduce heat transfer and NIR transmission.
- NVG filters for night vision compatible displays.
- Optical clear heater for defrosting and maintaining operating temperatures.
- Silk screen printing.

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