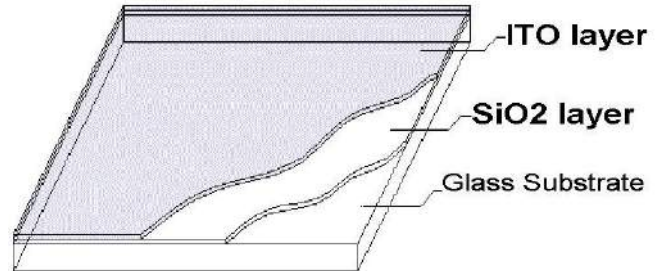


## ITO (Indium Tin Oxide) Coated Conductive Windows

**Chomerics** offers a range of EMI shielded windows with ITO conductive coatings for use in EMI/RFI shielding applications. The combination of high visible light transmission, near neutral color and low electrical resistance make an ideal EMI/RFI shield for electronic displays requiring moderate shielding effectiveness and high quality optical properties. **CHO-ITO™** is a cost effective alternative to a mesh laminated window.



### Product Format

CHO-ITO windows are offered as un laminated or fully laminated glass filters with an ITO coating of 12 ohms/sq. They can be ordered with a variety of finishing options, ready-to-install. Laminated versions offer greater strength and options for front surface treatment and edge profiles.

### Coating Properties

The soda lime float glass is coated with a primary layer of Silicone Oxide (SiO<sub>2</sub>) and secondary layer of Indium Tin Oxide (ITO).

### Termination Method

Direct contact can be made to the conductive surface by a suitable conductive fabric over foam gasket, silver loaded silicone gasket, copper tape or silver epoxy painted busbar. Do not use gaskets containing metal wire which can damage the coating or place the window directly against a hard plastic or metal surface.

Material Properties	
Surface resistance:	12 ohms/sq
Coating thickness:	150nm
Heat Resistance:	140°C
Humidity (60°C/90%RH):	No effect
Adhesion to glass:	MIL M-13508 4.4.6
Abrasion resistance:	MIL C-675-A 4.6.11
--	MIL E-12397-B
Transmittance @550nm:	89%
Color:	Clear
Reflection:	<4%

**Shielding Effectiveness**

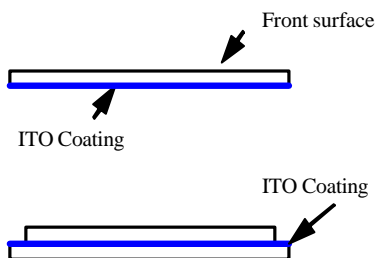
This table is a guide to the E-Field Shielding Effectiveness of CHO-ITO windows assuming that the window is correctly terminated. This data can be used as a performance guideline. Actual performance may vary based on test parameters and the application.

Window diagonal (mm)							
(MHz)	50	100	150	200	300	400	450
30	52	48	39	36	33	32	30
75	43	37	44	31	29	26	25
100	44	37	34	31	28	26	25
150	42	35	32	29	25	24	23
200	61	54	50	48	44	43	42
300	52	43	42	40	35	34	32
500	45	39	37	22	30	29	29
700	37	33	29	25	25	25	25
1000	32	26	24	24	24	24	24

The 12 ohms/sq ITO coating provides an excellent balance between shielding and optical performance. Coatings greater than 20 ohms/sq lack shielding effectiveness and lower ohm/sq coatings have reduced light transmission and increased light reflection.

**Product Range**

- Size:** parts up to 400 x 500mm
- Thickness:** 1.1mm un laminated  
2.5 to 4.3mm laminated
- Front finish:** Plain glass  
Anti-Reflective (MLAR) coating  
Non-Glare (VRD140) etch
- Edge form:** Square



**Step**

**Samples of CHO-ITO windows are available through the Chomerics website or by contacting your local sales representative.**

**Design Options**

- Contrast enhancement and privacy filter
- Colours
- Neutral density tints
- NIR blocking filters

Supplied by:  
[www.hitek-ltd.co.uk](http://www.hitek-ltd.co.uk)  
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