

Visible Conductive Coating

CO CCO1 Without Anti-reflection coating

CO CCO2 Including Anti-reflection coating

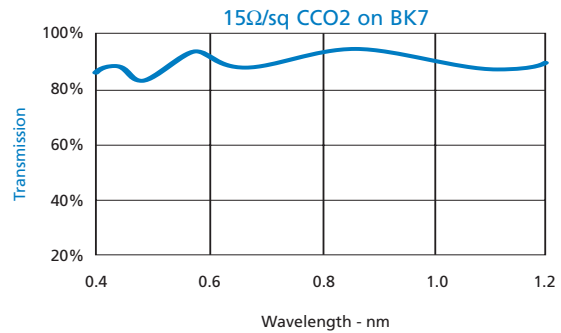
DESCRIPTION

This coating is designed to have high conductivity and transmission over the 0.4 - 1.2 μm range. It is suitable for use in aircraft instrumentation windows, CRT displays, anti-static, heating and EMC screening applications. L.C.D. Displays.

SPECTRAL PERFORMANCE

Spectral performance of a typical coating is shown below. (NB. No anti-reflection coating on back surface).

Ω/sq	%T on 1 mm thick BK7	
	CC01	CC02
008	82	88
010	84	88
020	87	91
050	84	92
100	85	93



ELECTRICAL PERFORMANCE

Sheet resistance in the range 5 Ω to 5K Ω per square can be achieved with tolerances of 10 to 15%, depending on resistivity requirements. This is achieved by varying the thickness of the Indium Tin Oxide (ITO) layer. The optical performance can then be achieved by adjusting the design of the anti-reflection coating.

BUSBARS

CVI Melles Griot can also provide busbar technology, required for Electromagnetic Interference (EMI) and heating applications.

EMC SCREENING PROPERTIES

Ω/sq	Shielding effectiveness (300-1000 MHz)
100	15 dB
020	36 dB
010	42 dB

ENVIRONMENTAL PERFORMANCE

The coating will pass the following tests:

Adhesion	MIL-C-48497	para 4.5.3.1
Humidity	MIL-C-48497	Para 4.5.3.2
Abrasion	MIL-C-48497	Para 4.5.3.3
Salt Solution	MIL-C-48497	Para 4.5.5.2