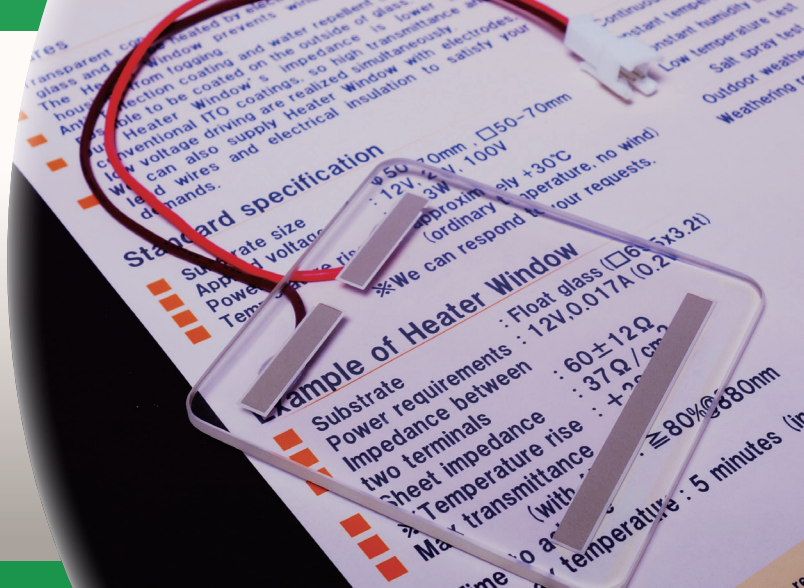


be Useful

Transparent Conductive coating

ITO Heater Window

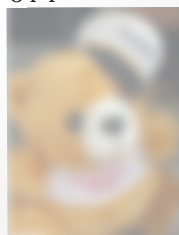


Features

- The inside of the window of an outdoor camera housing, such as a monitor camera, sometimes gets misted due to condensation at a low temperature. A clear dewing preventing heater can be built on this camera housing window.
- An ITO film has lower specific resistance than conventional tin oxide films and is better for drive by low voltage.
- Low specific resistance enables the film to thin and keep the transmittance high.
- By combining with an anti-reflection film, light transmission loss can be reduced further.
- In the case of high driving voltage, it can be handled by making resistance length long with laser trimming.
- It can be combined with water and oil repellent coatings.

Application Examples

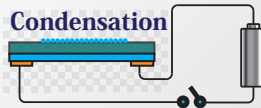
OFF



ON



Condensation

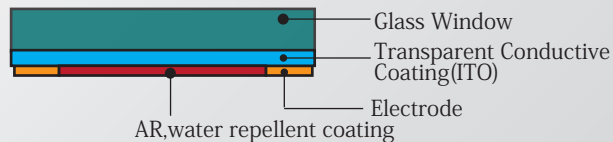


Heat



turn on electricity

Example of Heater Window



Environmental Test

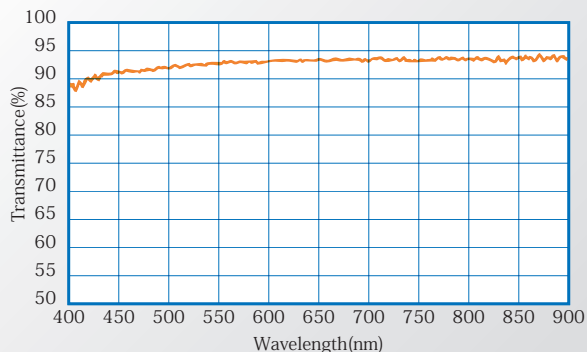
Test	Condition	Time	Result
Continuous current test	Room temperature	1000hr	OK
Constant temperature and constant humidity test	60°C, 90%	1000hr	OK
Low temperature test	-20°C	1000hr	OK
Salt spray test	NaCl 5% solution	500hr	OK
Outdoor weathering test	—	3000hr	OK
Weathering resistance test	—	360hr	OK

Standard specification

Substrate size	φ 50-70mm, □50-70mm
Applied voltage	12V, 24V, 100V
Power	2 ~ 3W
Temperature rise	approximately +30°C (ordinary temperature, no wind)

※We can respond to your requests.

Spectral Property



If you drive the Heater Window with the high voltage, approximately 100V, we divide the ITO coating to adjust the impedance. As the result some, narrow slits are constructed on the ITO coating, so we recommend you to set up your optical components to be out of focus on the Heater Window



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JQA-1194
JQA-EM1032