SCHOTT® Fiber Optic Faceplates

High Resolution Image Transfer

Performance Characteristics

Faceplates are used for high resolution, “zero thickness” image transfer applications that include CCD and CMOS coupling, CRT/LCD displays, image intensification, remote viewing, field flattening and x-ray imaging. In opto-electronic applications, faceplates are used as both input and output image intensifier windows. All SCHOTT faceplates are fabricated to customer-specific requirements. Typical shapes are round or rectangular and vary in size up to 300 mm square formats and larger. Typical element sizes range from as small as 2.5 µm up to 25 µm or larger. Faceplates can be manufactured to be vacuum tight.

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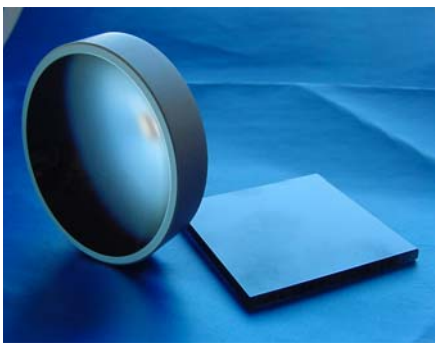
glass made of ideas

Typical Faceplate Specifications

Typical Performance Parameters	Glass Type*								
	47A	47ARH Radiation hardened	24A	24AS	24C	75A	75C	55A	55C
Fiber Size (µm)/ Resolution lp/mm**	6/102 4/128	6/102	25/23 10/64 8/72 6/102	8/72 6/102 4/128 2.5/203	10/64 6/102 4/128	27/23	6/102	60/10	60/10
Numerical Aperture	1.0	1.0	1.0	1.0	1.0	0.58	0.58	0.28	0.28
Stray Light Control (EMA)	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
Collimated Transmission @ 560nm 10mm Thick (normal) (%)	70	68	70	70	85	68	80	68	80
Coefficient of Thermal Expansion (x10 –7 /°C)	68	68	68	68	68	61	61	78	80
Lead Free	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
Phosphor Compatible	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Twist/Stretch Capability	No	No	Yes	Yes	Yes	No	No	No	No
Maximum SQ Formats (mm)	300	300	300	≤ 31	300	300	300	300	300

* Other special glass types available upon customer's request.

** Resolution Measurement performed with an 1951 USAF Resolution Target using diffuse white light illumination. Resolution may vary with other wavelengths.



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For more information please contact

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