

# 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  $\mu\text{m}$  up to 25  $\mu\text{m}$  or larger. Faceplates can be manufactured to be vacuum tight.

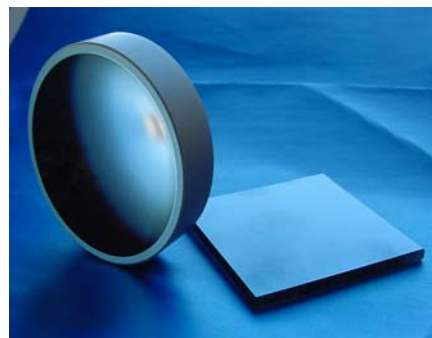
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## Typical Faceplate Specifications

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 <sup>-7</sup> /°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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