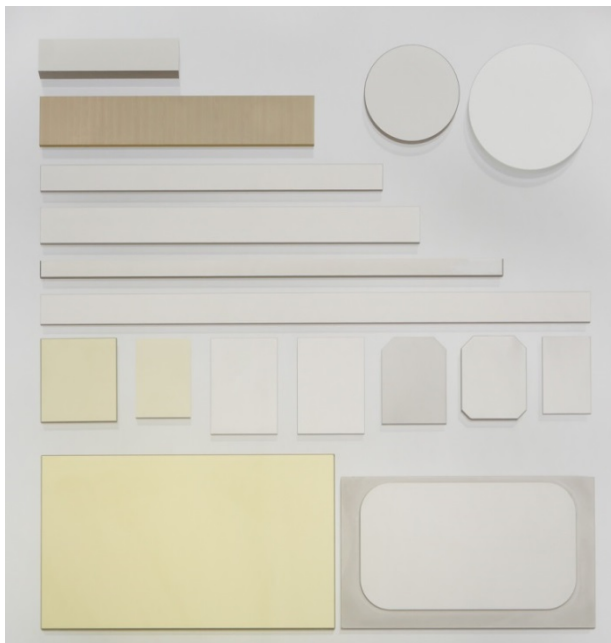


# SCHOTT® Fiber Optic Faceplates

New glass compositions for high resolution image transfer!  
Offering a greater selection of glasses to meet your specific needs.



## Performance Characteristics

Faceplates are used for high resolution, “zero thickness” image transfer applications that include CCD and CMOS coupling, LCD and OLED 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 in a variety of sizes up to 325 mm<sup>2</sup> formats. Typical element sizes range from as small as 2.5 μm to 25 μm or larger. Faceplates can be manufactured to be vacuum tight.

## NEW Glass Compositions for Faceplates

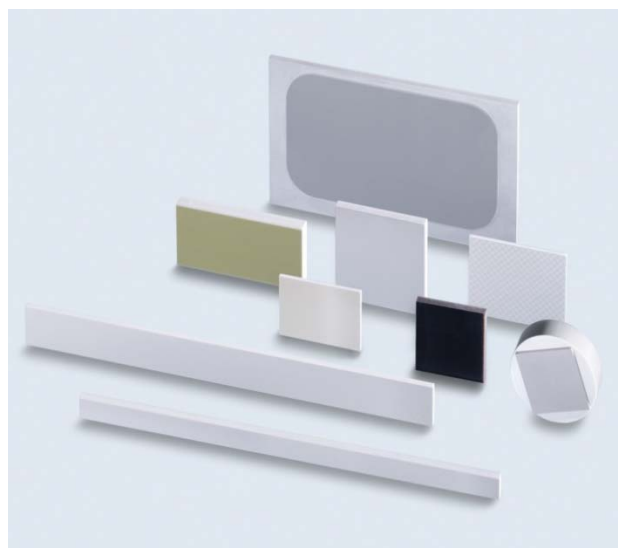
Glass Types*				
Typical Performance Parameters	47A	47A HT	47ARH Radiation hardened	RFG 88
Fiber size (μm)/Resolution lp/mm**	6/102 4/128	6/83	6/102 12/32	6/102 4/128
Numerical Aperture	1.0	1.0	1.0	0.88
Stray Light Control (EMA)	Yes	Yes	Yes	Yes
Collimated Transmission @ 550nm (3mm thick)	73	85	69	73
Coefficient of Thermal Expansion (x10 <sup>-7</sup> /°C)	68	70	68	63
Density (g/cm <sup>3</sup> )	4.15	4.5	4.15	3.41
Core/Clad Ratio	75/25	90/10	75/25 90/10	70/30
Lead Free	Yes	Yes	Yes	Yes
Phosphor Compatible	Yes	Yes	Yes	Yes
Maximum Square Formats (mm)	325	325	325	325

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



## Typical Faceplate Specifications

Typical Performance Parameters	Glass Type						
	24A	24AS	24C	75A	75C	55A	55C
Fiber size (µm)/Resolution lp/mm**	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	0.58	0.58	0.28	0.28
Stray Light Control (EMA)	Yes	Yes	No	Yes	No	Yes	No
Collimated Transmission @ 550nm (3 mm)	70	75	86	60	95	59	95
Coefficient of Thermal Expansion (x10 <sup>-7</sup> /°C)	68	68	68	61	61	78	80
Density (g/cm <sup>3</sup> )	4.0	4.0	4.0	3.05	3.05	2.4	2.4
Core/Clad Ratio	70/30	70/30	70/30	60/40	75/25	60/40	75/25
Lead Free	No	No	No	Yes	Yes	Yes	Yes
Phosphor Compatible	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maximum Square Formats (mm)	325	325	325	325	325	325	325



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

All specifications are subject to change without prior notice.  
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Lighting and Imaging  
SCHOTT AG  
Hattenbergstrasse 10  
55122 Mainz  
Germany  
Phone: +49 (0) 6131/66 7833  
Fax: +49 (0) 6131/66 7850  
lightingimaging@schott.com  
www.schott.com/lightingimaging

