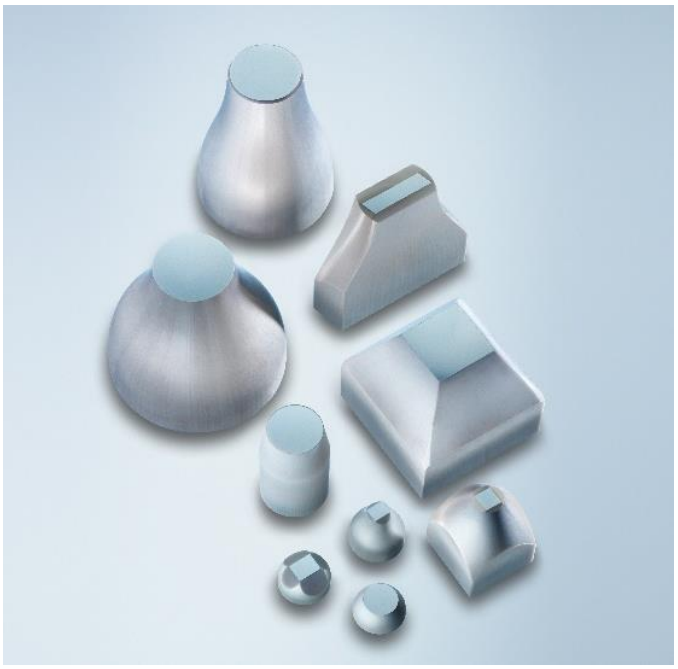
SCHOTT® Fused Imaging Fiber Optic Tapers



Performance Characteristics

SCHOTT's tapers provide a method of magnifying or reducing an image with minimum distortion in image transfer applications. Our taper material has been engineered for high transmission in the visible wavelengths, with some transmission in the near IR and very near UV. All tapers are fabricated to customer specific requirements and can be machined into configurations from round to round, square to square, round to square or rectangular. Formats range up to 75 mm in diameter. Typical magnification ratios range up to 3:1.

Our tapers can also be bonded together in arrays of linear, square or rectangular shape. SCHOTT also offers the technology to bond our fiber optics to various sensors. Applications and markets include Image Magnification or Minification, Displays, Image Coupling to CCD or CMOS Devices, Medical & Dental Radiology, Intensified Video Imaging, Biological Imaging, Displays and Avionics.

All tapers are compatible with common optical coating capabilities; AR, Hot Mirror, ITO, etc.

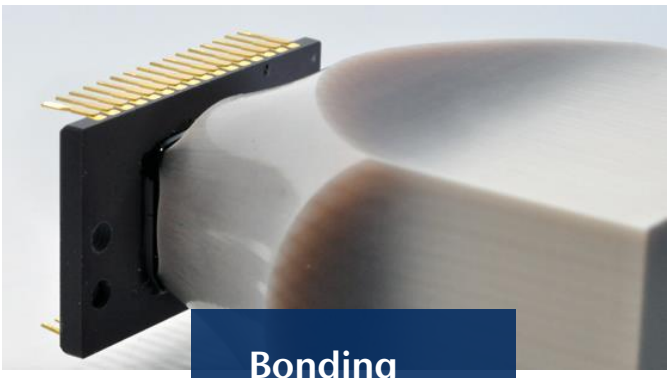
Optical bonding to Micro-OLED displays, CCD or CMOS

Please ask us about our customized "Package Solutions" bonding fiber optic tapers to CCD/CMOS Sensors or OLED displays.

Typical Taper Specification

Typical Performance Parameters	24A	24AS	24C
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
Numerical Aperture	1.0	1.0	1.0
Stray Light Control (EMA)	Yes	Yes	No
Collimated Transmission @ 550nm (10mm thick) – normal (%)	70	70	85
Coefficient of Thermal Expansion ($x10^{-7}$/°C)	68	68	68
Density (g/cm^3)	4.0	4.0	4.0
Core/Clad Ratio	70/30	70/30	70/30
Lead Free	No	No	No
Phosphor Compatible	Yes	Yes	Yes
Twist/Stretch Capability	Yes	Yes	Yes
Maximum Diameter (mm)	75	31	75

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



Bonding

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