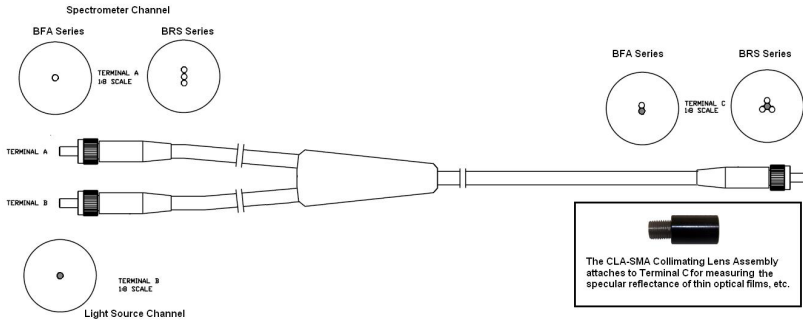


BFA & BRS Bifurcated Fiber Assemblies



A bifurcated fiber assembly combines optical fibers at a common end with the fiber bundle bifurcated into two separate channels for connection to a light source and a spectrometer.

A bifurcated fiber assembly can measure the specular reflectance from surfaces such as thin optical films. A collimating lens is attached to the common end of the assembly. When positioned at a line-of-sight that is normal to the surface under test, it measures specular reflectance for 0° angle of incidence.

Highlights:

- BRS Stacked Fibers

Applications:

- Reflectance

All bifurcated fiber assemblies feature standard SMA 905 connectors. Assemblies are available with UV or NIR grade fused silica optical fibers with fiber core diameters of either 200 μm or 400 μm.

The BFA series of bifurcated fiber assemblies feature single core fibers in the split terminals which are combined at the common terminal.

The BRS series of bifurcated fiber assemblies feature a mix of fiber grades at the common end with three fibers evenly distributed around a center fiber. The bifurcated ends are a single UV grade fiber in one terminal and three NIR grade fibers in a linear format in the other terminal which will align to a spectrometer entrance slit.

Specifications:

UV Grade Spectral Range	190 nm - 1100 nm
NIR Grade Spectral Range	380 nm – 2400 nm
Core Material	silica
Cladding Material	doped silica
Buffer Material	polyimide
Jacket Material	PVC
Connectors	SMA905
Concentricity	± 3 μm
Numerical Aperture (NA)	0.22 ± 0.02
Acceptance Cone (Full Angle)	25.4 degrees
Overall Length	1.5 m
Operating Temperature	up to +80°C (176°F)

Ordering Information:

MODEL NUMBER	FIBER TYPE	CORE DIAMETER (μm)
BFA-200-0.22-1.5-UV	UV Grade (High -OH)	200 ± 4
BFA-200-0.22-1.5-NIR	NIR Grade (Low -OH)	200 ± 4
BFA-400-0.22-1.5-UV	UV Grade (High -OH)	400 ± 8
BFA-400-0.22-1.5-NIR	NIR Grade (Low -OH)	400 ± 8
BRS-200-0.22-1.5-MIX	3 NIR Grade (Terminal A) 1 UV Grade (Terminal B)	200 ± 4
BRS-400-0.22-1.5-MIX	3 NIR Grade (Terminal A) 1 UV Grade (Terminal B)	400 ± 8