

Specialty Fibers

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The items listed in this sheets are standard configurations and sizes.
Other configurations may be available on request.
Please let us know what we can do to help satisfy your project requirements.



Select Sheet

S series (for UV-VIS)

Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket Diameter [μm]	Attenuation [dB/km]	Coating/Jacket Material	NA	Operation Temperature [$^{\circ}\text{C}$]	Minimum Bending Radius [mm]
S.200/220	Step Index	SiO_2 (High-OH) /F- SiO_2	200 / 220	900	≤ 10 (@800nm)	Silicone/ Polyamide	0.22	-20 to 60	44
S.400/440			400 / 440	1100	as nominal value				88
S.600/660			600 / 660	1400	≤ 200				132
S.800/880			800 / 880	1700	(@300nm)				176
S.1000/1100			1000 / 1100	2000					220

SB series (for VIS-NIR)

Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket Diameter [μm]	Attenuation [dB/km]	Coating/Jacket Material	NA	Operation Temperature [$^{\circ}\text{C}$]	Minimum Bending Radius [mm]
S.200/220B	Step Index	SiO_2 (Low-OH) /F- SiO_2	200 / 220	900	≤ 10 (@850nm)	Silicone/ Polyamide	0.22	-20 to 60	44
S.400/440B			400 / 440	1100	as nominal value				88
S.600/660B			600 / 660	1400	≤ 10				132
S.800/880B			800 / 880	1700	(@1064nm)				176
S.1000/1100B			1000 / 1100	2000					220

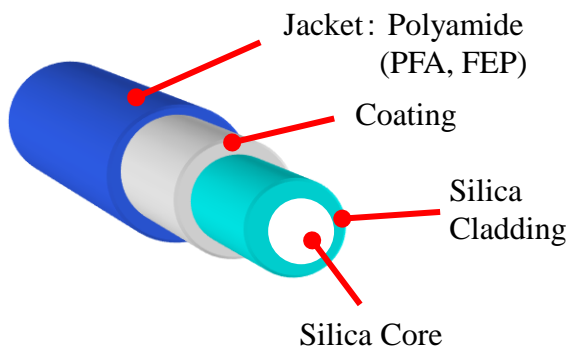
G series (for VIS-NIR)

Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket Diameter [μm]	Attenuation [dB/km]	Coating/Jacket Material	NA	Operation Temperature [$^{\circ}\text{C}$]	Minimum Bending Radius [mm]
G.200/250	Graded Index	GeO_2 - SiO_2 / SiO_2	200 / 250	900	≤ 10 (@850nm)	Silicone/ Polyamide	0.21	-20 to 60	50
G.400/500			400 / 500	1100					100
G.600/750			600 / 750	1400					150
G.800/1000			800 / 1000	1700					200

- Other size (Core Diameter, Cladding Diameter) may be available
- Jacket color (Polyamide : Standard)
S series and G series : Black / SB series : White
- Tolerance : Core diameter and Cladding diameter : $\pm 5\%$
Jacket diameter : $\pm 100\mu\text{m}$ (Core diameter 200~800 μm)
 $\pm 200\mu\text{m}$ (Core diameter 1000 μm)
NA : ± 0.02

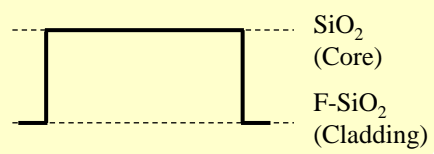
- Please contact us for customized products
- PFA, FEP, Jacketed Fibers are available

Jacketed Fiber Structure

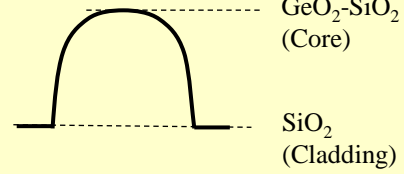


Refractive Index Profile

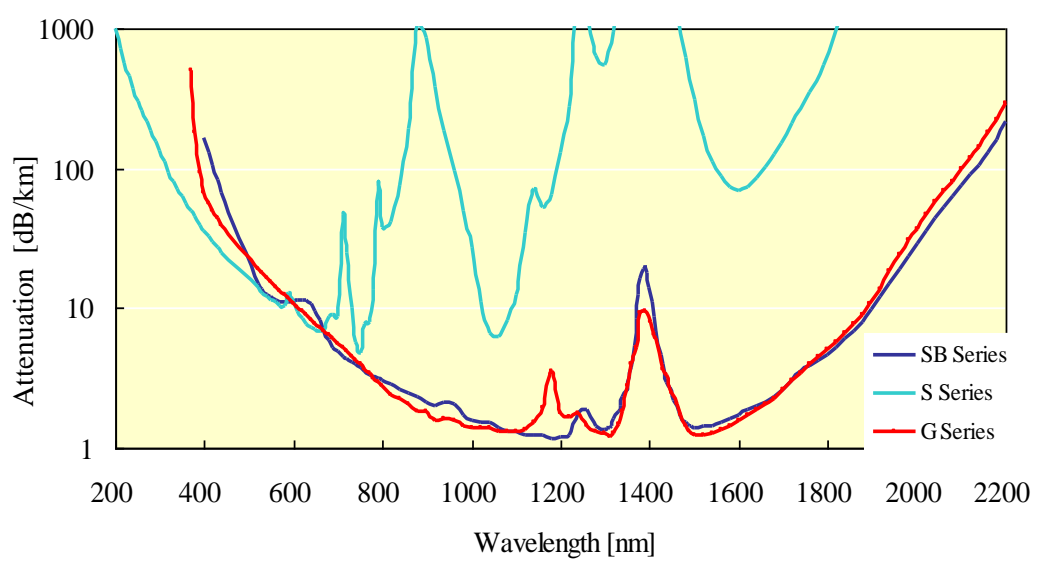
S & SB series



G series



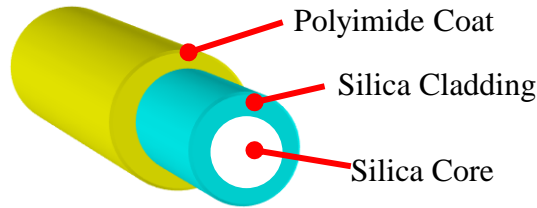
Spectral Attenuation (typical)



Large Core Fiber : SB series (for VIS-NIR)

Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Coating Diameter [μm]	Attenuation [dB/km]	Coating Material	NA	Operation Temperature [$^{\circ}\text{C}$]	Minimum Bending Radius [mm]
S.200/220BPI	Step Index	SiO ₂ (Low-OH)/ F-SiO ₂	200 / 220	245	≤ 10 (@850nm)	Polyimide	0.22	-40 to 300	44
S.300/330BPI			300 / 330	360					66
S.400/440BPI			400 / 440	470					88

Fiber Structure



- Tolerance : Core diameter and Cladding diameter : $\pm 5\%$
 Coating diameter : $\pm 5\mu\text{m}$ (Core diameter $200\mu\text{m}$)
 $\pm 10.8\mu\text{m}$ (Core diameter $300\mu\text{m}$)
 $\pm 14\mu\text{m}$ (Core diameter $400\mu\text{m}$)
 NA : ± 0.02

Notes

- The values in these tables are nominal values.
- The dimensions (core/cladding diameter, jacket/coating diameter of fiber) are measured in sampling.
- Minimum Bending Radius is the recommended value for long term.
- The dimensions (core/cladding diameter, jacket/coating diameter of fiber), attenuation, NA (Numerical Aperture) and length are described on the test report.
- Operation temperature is guaranteed by design, and attenuation is measured at room temperature.
- NA value is calculated by the data from preform analyzer.
- Our products supports RoHS Directive.
- Please contact us for customized products.
- Other size (Core Diameter, Cladding Diameter) may be available.

Warranty

- Warranty period is one year after shipment. Once the fiber is drawn out from package or bobbin, we cannot guarantee all of performance.
- If you have any doubts about the contents of this specification and any matter not stated in this specification, we will consult with you separately.