

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.



Large Core Fiber (Jacketed)

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 [°C]	Minimum Bending Radius [mm]
S.200/220	Step Index	SiO ₂ (High-OH)/ F-SiO ₂	200 / 220	900	200 (@300nm) 10 (@800nm)	Silicone / Polyamide	0.22	-20 to 60	44
S.400/440			400 / 440	1100					88
S.600/660			600 / 660	1400					132
S.800/880			800 / 880	1700					176
S.1000/1100			1000 / 1100	1700					220
S.1500/1650			1500 / 1650	2400					330
S.2000/2100			2000 / 2100	3100					420

SB series (for VIS-NIR)

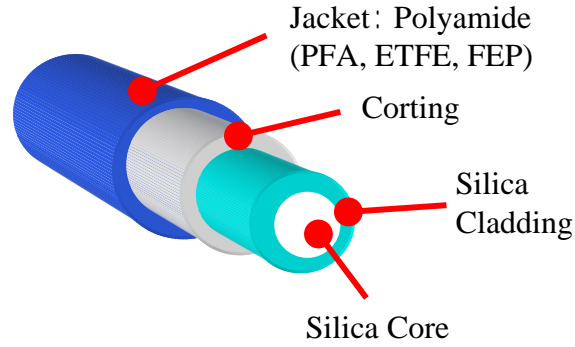
Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket Diameter [μm]	Attenuation [dB/km]	Coating / Jacket Material	NA	Operation Temperature [°C]	Minimum Bending Radius [mm]
S.200/220B	Step Index	SiO ₂ (Low-OH)/ F-SiO ₂	200 / 220	900	10 (@850nm and @1064nm)	Silicone / Polyamide	0.22	-20 to 60	44
S.400/440B			400 / 440	1100					88
S.600/660B			600 / 660	1400					132
S.800/880B			800 / 880	1700					176
S.1000/1100B			1000 / 1100	1700					220
S.1500/1650B			1500 / 1650	2400					330
S.2000/2100B			2000 / 2100	3100					420

G series (for VIS-NIR)

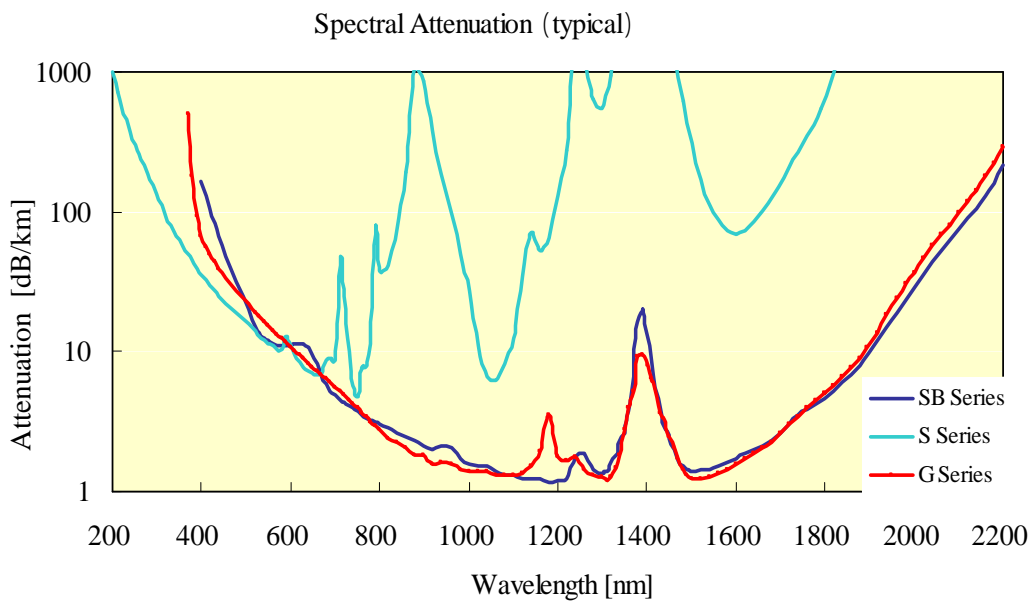
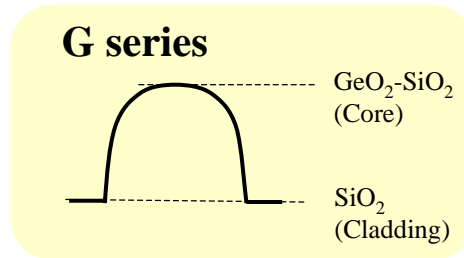
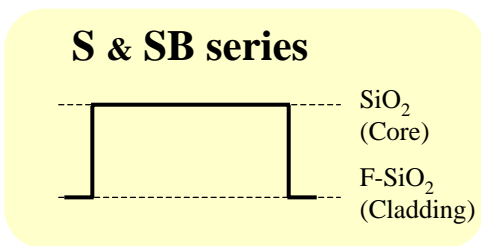
Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket Diameter [μm]	Attenuation [dB/km]	Coating / Jacket Material	NA	Operation Temperature [°C]	Minimum Bending Radius [mm]		
G.200/250	Graded Index	GeO ₂ -SiO ₂ / SiO ₂	200 / 250	900	10 (@850nm and @1064nm)	Silicone / 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		
G.200/250L			Graded Index	GeO ₂ -SiO ₂ / SiO ₂	200 / 250	900	10 (@850nm and @1064nm)	Silicone / Polyamide	0.25	-20 to 60	50
G.400/500L					400 / 500	1100					100
G.600/750L					600 / 750	1400					150
G.800/1000L					800 / 1000	1700					200

- Other size (Core Diameter, Cladding Diameter) is available
- Non-standard NA Fiber is available
- PFA, ETFE, FEP, Jacketed Fibers are available
- Minimum Bending Radius is Long Term Bending Radius
- Our products supports RoHS Directive

Jacketed Fiber Structure



Refractive Index Profile



Large Core Fiber Cord

Select Sheet

S series (for UV-VIS)

Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket/ Cord Diameter [μm]	Attenuation [dB/km]	Coating/ Jacket/ Cord Material	NA	Operation Temperature []	Minimum Bending Radius [mm]
SC.200/220	Step Index	SiO ₂ (High-OH)/ F-SiO ₂	200 / 220	900 / 2800	200 (@300) 10 (@800)	Silicone / Polyamide / PVC	0.22	-20 to 60	44
SC.400/440			400 / 440	1100 / 2800					88
SC.600/660			600 / 660	1400 / 2800					132
SC.800/1000			800 / 1000	1700 / 3300					200

SB series (for VIS-NIR)

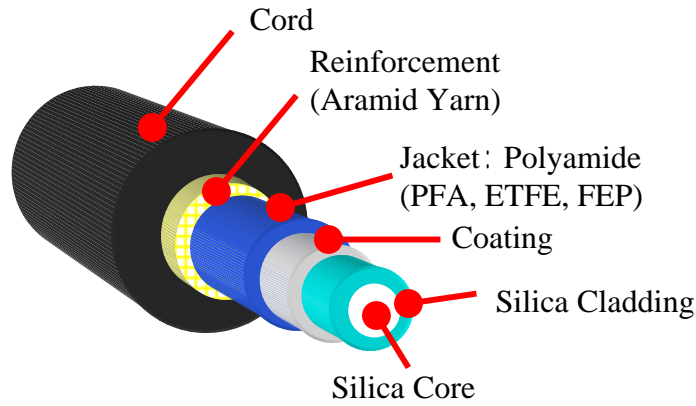
Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket/ Cord Diameter [μm]	Attenuation [dB/km]	Coating/ Jacket/ Cord Material	NA	Operation Temperature []	Minimum Bending Radius [mm]
SC.200/220B	Step Index	SiO ₂ (Low-OH)/ F-SiO ₂	200 / 220	900 / 2800	10 (@850nm and @1064nm)	Silicone / Polyamide / PVC	0.22	-20 to 60	44
SC.400/440B			400 / 440	1100 / 2800					88
SC.600/660B			600 / 660	1400 / 2800					132
SC.800/1000B			800 / 1000	1700 / 3300					200

G series (for VIS-NIR)

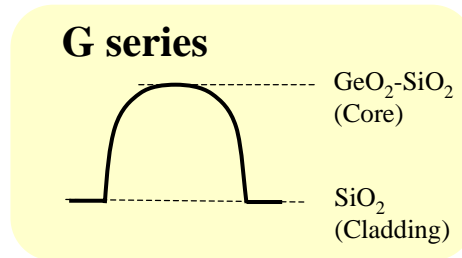
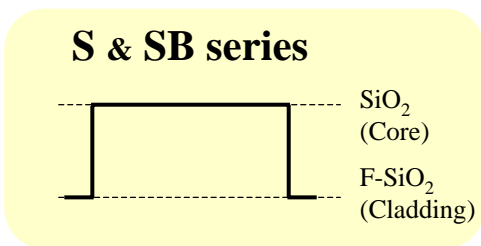
Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket/ Cord Diameter [μm]	Attenuation [dB/km]	Coating/ Jacket/ Cord Material	NA	Operation Temperature []	Minimum Bending Radius [mm]
GC.200/250	Graded Index	GeO ₂ -SiO ₂ / SiO ₂	200 / 250	900 / 2800	10 (@850nm and @1064nm)	Silicone/ Polyamide/ PVC	0.21	-20 to 60	50
GC.400/500			400 / 500	1100 / 2800					100
GC.600/750			600 / 750	1400 / 2800					150
GC.800/1000			800 / 1000	1700 / 3300					200
GC.200/250L			10 (@850nm and @1064nm)	Silicone/ Polyamide/ PVC	0.25	-20 to 60	200 / 250	900 / 2800	50
GC.400/500L							400 / 500	1100 / 2800	100
GC.600/750L							600 / 750	1400 / 2800	150
GC.800/1000L							800 / 1000	1700 / 3300	200

- Other size (Core Diameter, Cladding Diameter) is available
- Non-standard NA Fiber is available
- PFA, ETFE, FEP, Jacketed material are available
- Minimum Bending Radius is Long Term Bending Radius
- Our products supports RoHS Directive

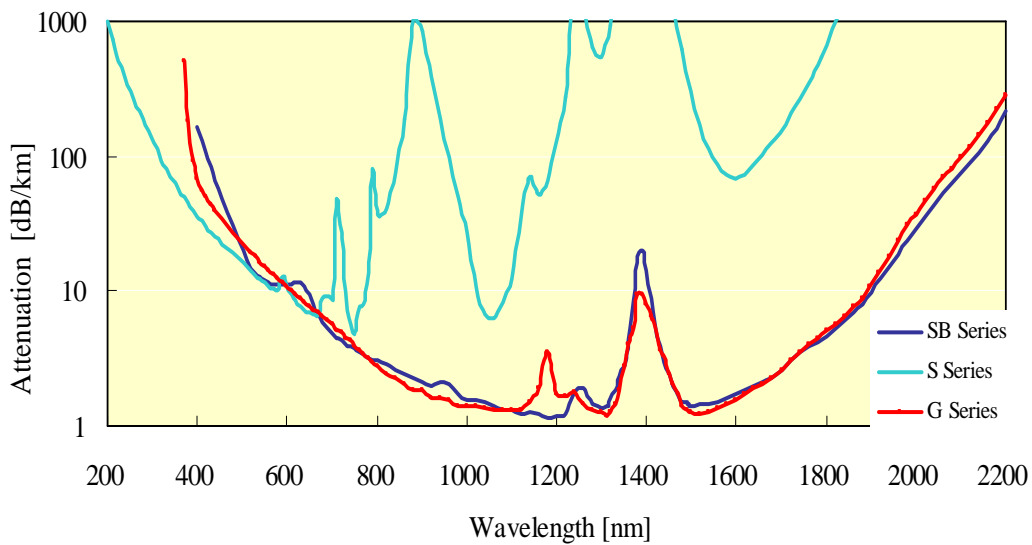
Cord Structure



Refractive Index Profile



Spectral Attenuation (typical)



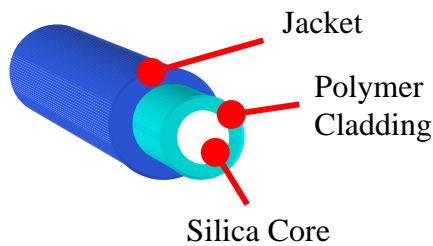
Hard Polymer Cladding Fiber (HPCF)

Select Sheet

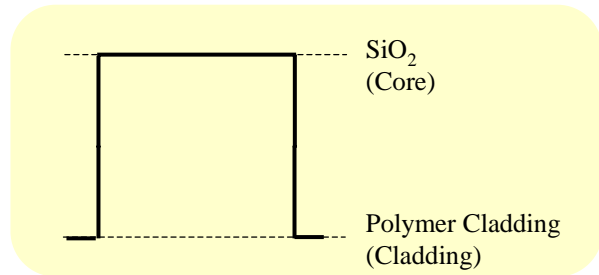
Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Jacket Diameter [μm]	Attenuation [dB/km]	Coating / Jacket Material	NA	Operation Temperature []	Minimum Bending Radius [mm]
PCF.200/230/500B ETFE	Step Index	SiO ₂ (Low-OH)/ Acrylate	200 / 230	500	20 (@1064nm)	ETFE	0.40	-40 to 120	40
PCF.300/330/650B ETFE			300 / 330	650					60
PCF.400/430/730B ETFE			400 / 430	730					80
PCF.600/630/1040B ETFE			600 / 630	1040					120

- Other size (Core Diameter, Cladding Diameter) is available.
- Minimum Bending Radius is Long Term Bending Radius
- Our products supports RoHS Directive

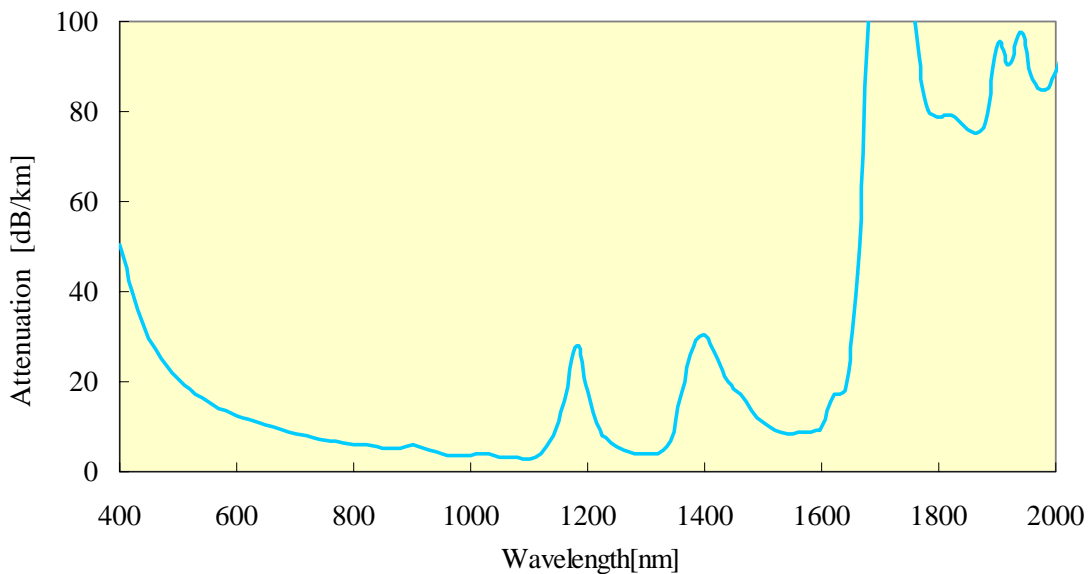
HPCF Structure



Refractive Index Profile



Spectral Attenuation (typical)



PI Coated Fiber

Select Sheet

Large Core Fiber : S series (for UV-VIS)

Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μm]	Coating Diameter [μm]	Attenuation [dB/km]	Coating Material	NA	Operation Temperature []	Minimum Bending Radius [mm]
S.118/125PI	Step Index	SiO ₂ (High-OH) / F-SiO ₂	118 / 125	150	200 (@300nm)	Polyimide	0.22	-40 to 300	25
S.200/220PI			200 / 220	245	300 (@300nm) 10 (@800nm)				44

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 []	Minimum Bending Radius [mm]
S.200/220BPI	Step Index	SiO ₂ (Low-OH) / F-SiO ₂	200 / 220	245	10 (@850nm and @1064nm)	Polyimide	0.22	-40 to 300	44
S.300/330BPI			300 / 330	360	10 (@850nm and @1064nm)				66

Single Mode Fiber (SMF)

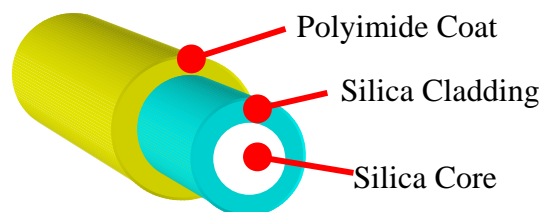
Model Name	Core / Cladding Material	MFD [μm]	Clad Diameter [μm]	Coating Diameter [μm]	Attenuation [dB/km]	Cut off Wevelengs [nm]	Coating Material	Operation Temperature []	Minimum Bending Radius [mm]
SM13-8/125 PI	GeO ₂ -SiO ₂ / SiO ₂	8.6	125	155	0.7 (@1310nm) 0.6 (@1550nm)	1290	Polyimide	-40 to 300	25

Multi Mode Fiber (MMF)

Model Name	Core / Cladding Material	Core Diameter [μm]	Cladding Diameter [μm]	Coating Diameter [μm]	Attenuation [dB/km]	NA	Coating Material	Operation Temperature []	Minimum Bending Radius [mm]
G.50/125 PI	GeO ₂ -SiO ₂ / SiO ₂	50	125	155	4.0 (@850nm) 2.0 (@1300nm)	0.2	Polyimide	-40 to 300	25

- Other size (Core Diameter, Cladding Diameter) is available
- Non-standard NA Fiber is available
- Minimum Bending Radius is Long Term Bending Radius
- Our products supports RoHS Directive

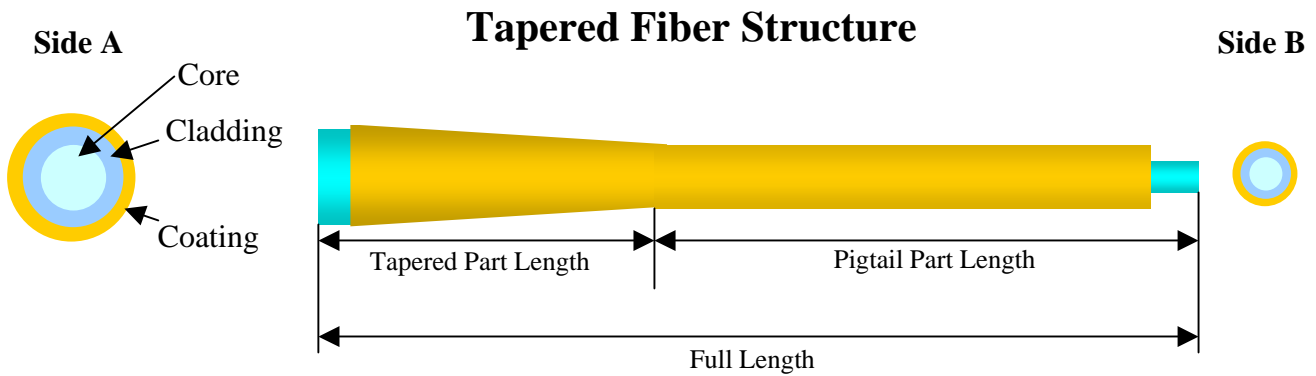
Fiber Structure



Tapered Fiber (Custom Design)

Model Name	Refractive Index Profile	Core / Cladding Material	Core / Cladding Diameter [μ m]		Side A / Side B Dia. Ratio	Full Length [m]	Tapered Part Length [m]	Coating Material	NA	Operation Temperature [°C]	Minimum Bend Radius [mm]	
			Side A	Side B							Tapered	Pigtail
TS.2200-1000-8	Step Index	SiO ₂ (High-OH)/F-SiO ₂	2200 / 2330	1000 / 1060	2.2	>8	>3	Acrylate	0.22	- 20 to 60	1165	212
TS.545-200-5			545 / 600	200 / 220	2.7	>5	>3	Acrylate	0.22		300	44

- Other size (Core Diameter, Cladding Diameter) is available
- Non-standard NA Fiber is available
- NA is calculated from Preform’s refractive index profile
- Side A / Side B Dia. Ratio ; Possible up to 3
- Length; Tapered length- Typically >3
 Full length- Typically >5
- Minimum Bending Radius is Long Term Bending Radius



Radiation Resistant Fiber

Single Mode fiber

Model name	MFD [μ m]	Cladding Diameter [μ m]	Coating Diameter [μ m]	Attenuation [dB/km]	Coating Material	Cut-off Wavelength (in cable) [nm]	Operating Wavelength [μ m]	Minimum Bending Radius [mm]
SM 13-8/125-R	8.6	125	245	0.5	Acrylate	1260	1.3	25
SM 85-7/125-R	6.8			15		800	0.85	

Multi Mode fiber

Model name	Core Diameter [μ m]	Cladding Diameter [μ m]	Coating Diameter [μ m]	Attenuation [dB/km]	Coating Material	NA	Operating Wavelength [μ m]	Minimum Bending Radius [mm]
S.50/125-R	50	125	245	25	Acrylate	0.2	0.85	25