

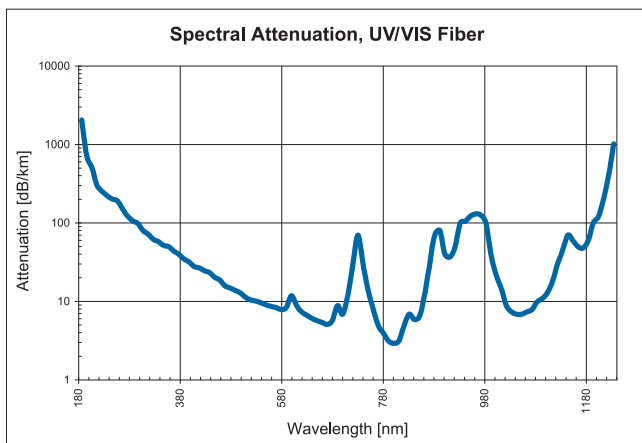
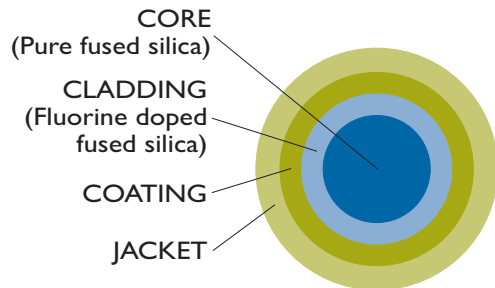
# SOLARIZATION RESISTANT FIBERS



OPERATING SPECTRAL RANGE: 180-1200 NM

## FEATURES

- Enhanced transmission in the Deep UV region (180-240 nm) as compared to standard UV/VIS fibers
- Laser damage resistant
- Radiation resistant
- Specialty coatings available for high temperatures, high vacuum and harsh environments
- Biocompatible materials
- Sterilizable by ETO, e-beam, gamma radiation
- Higher transmission than plastic clad silica (PCS) fibers between 200 nm and 300 nm



## FIBER PROPERTIES

- Step index profile
- Clad/core ratio: 1.1 typical
- Numerical aperture:  $0.22 \pm 0.02$  typical
- Proof test: 70 kpsi
- Minimum bend radius:  
300 times the clad radius (momentary)  
600 times the clad radius (long term)
- Laser damage threshold:  
> 30 mJ/mm<sup>2</sup> (KrF, 25 ns pulse at 248 nm)  
> 100 mJ/mm<sup>2</sup> (XeCl, 30 ns pulse at 308 nm)
- Radiation induced attenuation:  
< 10 dB/km at dose values up to 1 Mrad

## OPTIONS

### Coating materials

- Acrylate (-40°C to 85°C)
- Silicone (-40°C to 150°C)
- Polyimide (-190°C to 385°C)

### Jacket materials

- Acrylate (-40°C to 85°C)
- Nylon (-40°C to 100°C)
- Tefzel (-40°C to 150°C)

## APPLICATIONS

### Medical

- Lithotripsy
- Angioplasty
- Ophthalmology
- Photodynamic therapy
- Laser surgery

### Industrial/Scientific

- Spectroscopy
- Laser welding/soldering
- Remote sensing
- Aerospace
- Military



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PRODUCT CODE	CORE DIAMETER [μm] ± 2 %	CLAD DIAMETER [μm] ± 2 %	COATING DIAMETER [μm] ± 3 %	STANDARD COATING	SECOND BUFFER DIAMETER [μm] ± 5 %	NUMERICAL APERTURE ± 0.02
<b>POLYIMIDE COATED FIBERS (-190°C TO 385°C)</b>						
SNS200/220PI	200	220	245	POLYIMIDE	-	0.22
SNS300/330PI	300	330	355	POLYIMIDE	-	0.22
SNS400/440PI	400	440	470	POLYIMIDE	-	0.22
SNS600/660PI	600	660	710	POLYIMIDE	-	0.22
<b>NYLON JACKETED FIBERS (-40°C TO 100°C)</b>						
SNS200/220AN	200	220	350	ACRYLATE	500	0.22
SNS300/330AN	300	330	440	ACRYLATE	650	0.22
SNS400/440AN	400	440	550	ACRYLATE	700	0.22
SNS600/660AN	600	660	800	ACRYLATE	1000	0.22
SNS800/880AN	800	880	1050	ACRYLATE	1300	0.22
SNS1000/1100AN	1000	1100	1250	ACRYLATE	1500	0.22
SNS1500/1650AN	1500	1650	1900	ACRYLATE	2200	0.22
<b>TEFZEL JACKETED FIBERS (-40°C TO 150°C)</b>						
SNS200/220ST	200	220	350	SILICONE	500	0.22
SNS300/330ST	300	330	450	SILICONE	700	0.22
SNS400/440ST	400	440	550	SILICONE	800	0.22
SNS600/660ST	600	660	800	SILICONE	1200	0.22
SNS800/880ST	800	880	1000	SILICONE	1550	0.22
SNS1000/1100ST	1000	1100	1250	SILICONE	1800	0.22

**OPTIONAL NYLON OR TEFZEL JACKET FOR POLYIMIDE COATED FIBERS AVAILABLE.**

**OTHER SPECIFICATIONS UPON REQUEST.**