

VIS/NIR Grade All Silica Fiberoptics



DESCRIPTION

All silica, Vis/NIR grade (low OH⁻), fiber optics, have been the back bone of many critical industrial, medical, military and basic research applications for decades. The long track record of these fibers has produced a reliable and consistent availability of this high grade material at an excellent value. The purity of this material has improved to the point that many now call this material "ultra low OH⁻" or "ultra dry" because the raw glass is now commonly made with such low levels of OH⁻

ion (well below 1 ppm) that it has virtually extended its useful range out to 2500nm. This fiber should be used in almost any critical spectroscopic, sensing or laser application above 500nm. The 0.22 NA is well matched to the high resolution fiber-optic spectrometers that are available and yet is broad enough to allow easy coupling from lasers.

APPLICATIONS

- Vis/NIR Spectroscopy
- Process control
- Laser delivery
- Sensors
- Laser welding, cutting and marking
- Plasma diagnostics
- Flame sensing
- FTIR
- Medical diagnostics and photo therapy
- High temperatures
- Vacuum environments and feedthroughs
- Efficient bundles and arrays of all kinds

PROPERTIES

- Step index profile
- Silica core/Silica clad
- 0.22 NA
- -190°C to +385°C operation
- High core to clad ratio
- Wavelength range from 500 to 2500nm
- Laser power - 1.3KW/mm² CW at 1.06µm, up to 10J - Pulsed

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CHARACTERISTICS (Typical)

- 0.22NA (12.7 degree 1/2 angle) +/- 0.02
- Core/clad diameters +/- 2%
- Jacket diameter +/- 5%
- Long term bend radius - 300 times clad diameter
- Proof tested
- Operating temperature to +385°C
- Polyimide jacket except for 1000µm which is silicone and tefzel

NOTES

- Other sizes, NAs, jacketing available.
- The curve depicts what can be expected from typical lots of fiber but actual results may vary somewhat.

Standard Sizes in Core/Clad/Jacketing (µm)

50/60/72

100/120/140

200/220/243

300/330/365

320/385/415

400/440/480

600/660/710

1000/1060/1200/1600

Romack PN

221210-0050

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221210-0200

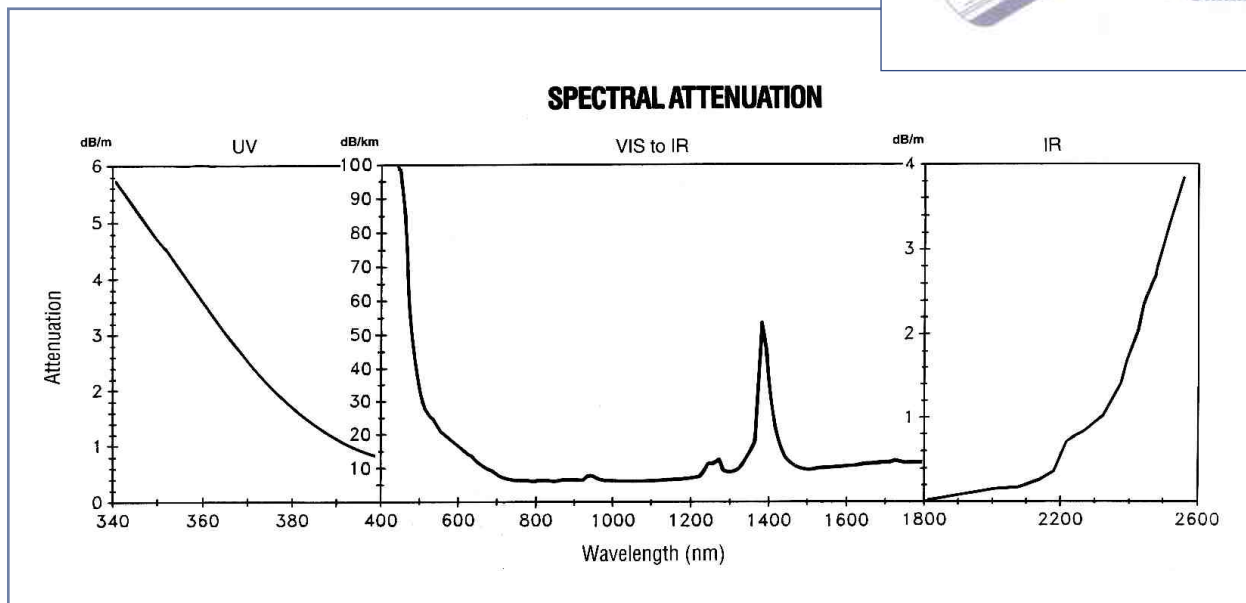
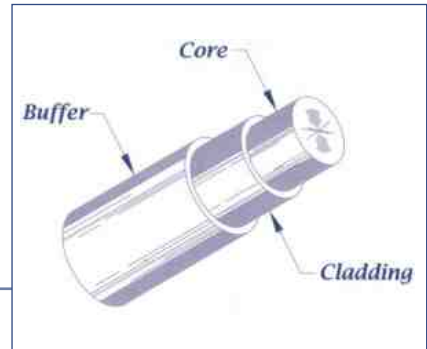
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