PLASTIC CLAD SILICA (PCS) FIBERS

OPERATING SPECTRAL RANGE: 300-1200 NM FOR UV/VIS
300-2400 NM FOR VIS/NIR

FEATURES
- Cost effective alternative to all silica fibers
- Better UV and NIR transmission than hard polymer clad silica (HPCS) fibers
- UV/VIS and VIS/NIR types available
- High numerical aperture
- Biocompatible materials
- Sterilizable by ETO, gamma radiation
- Radiation resistant
- Core diameter up to 2 mm
- High concentricity

FIBER PROPERTIES
- Step index profile
- Numerical aperture: 0.37 (2 meters, falls to 0.30 for large lengths)
- Proof test: 70 kpsi
- Minimum bend radius:
  - 100 times the clad radius (momentary)
  - 600 times the clad radius (long term)
- Laser damage threshold:
  - > 100 kW/mm² (Nd:YAG, cw at 1064 nm)

APPLICATIONS

Medical
- Laser surgery
- Angioplasty
- Dermatology
- Urology
- Photodynamic therapy
- Diagnostics

Industrial/Scientific
- Spectroscopy
- Remote illumination
- Remote sensing
- Laser diode coupling
- Laser beam delivery
- Laser welding, marking, cutting and soldering

Spectral Attenuation, PCS Fibers

Wavelength [um]

Attenuation [dB/km]

CORE (Pure fused silica)
CLADDING (Silicone)
JACKET

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PLASTIC CLAD SILICA FIBERS
OPERATING SPECTRAL RANGE: 200-1200 NM FOR UV/VIS
300-2400 NM FOR VIS/NIR

<table>
<thead>
<tr>
<th>PRODUCT CODE</th>
<th>CORE DIAMETER [μm] ± 2 %</th>
<th>CLAD DIAMETER [μm] ± 3 %</th>
<th>JACKET DIAMETER [μm] ± 5 %</th>
<th>NUMERICAL APERTURE ± 0.02</th>
<th>SPECIFIC FEATURE</th>
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OPTIONAL ACRYLATE JACKET AVAILABLE.

FOR VIS/NIR PCS FIBER, REPLACE UV WITH IR IN THE PRODUCT CODE.

OTHER SPECIFICATIONS UPON REQUEST.