

## **Solarization Resistant**

Typical characteristics of standard High -OH core (FV), hydrogen loaded core (UVMI), modified core (UVM) and deep UV enhanced (FD) are shown in the following table. Let Polymicro assist you in selecting the best-suited fiber for your application. Standard core sizes of 100μm, 200μm, 300μm, 400μm, and 600μm. Custom sizes available.

## Polymicro SILICA/ SILICA Optical Fiber DUV

## **CHARACTERISTICS**

Step index

Numerical aperture: 0.22 ± 0.02

UV-VIS-NIR transmission, 180nm to 850nm

Sterilizable and bio-compatible -

USP class VI\*

Optional jacketing available

Core sizes:  $50\mu m$  to  $> 1000\mu m$ 

Excellent concentricity

Tight tolerances

Silica core, doped silica clad

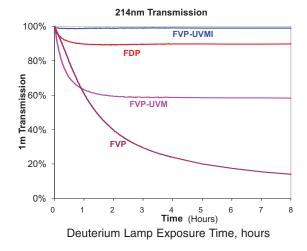
Polyimide concentricity: ≤ 3µm

Polyimide buffer standard; Silicone, Acrylate, Fluoropolymer or dual

buffer also available

Temperature: operating -65° to +200°C

Proof tested to 100kpsi



## **Specifications**

Fiber Type	Wavelength Range	Characteristics	Cost
FVP	240-850nm	<ul> <li>Economical</li> <li>High solarization</li> <li>Damage below 240nm</li> <li>Minimal solarization recovery</li> <li>All sizes available</li> <li>Alternate coatings available</li> </ul>	Very Low
FVP-UVM	200-850nm	Moderate solarization damage     Minimal solarization recovery     All sizes available     Alternate coatings available	Low
FVP-UVMI	<200-850nm	<ul> <li>Very small solarization damage</li> <li>Diameter and temperature dependent         Degradation with time</li> <li>Only larger diameters recommended (≥400μm)</li> <li>Refrigeration recommended when not in use</li> <li>Reverts to FVP-UVM over time</li> <li>Available with polyimide coating only</li> </ul>	Moderate
FDP	<200-850nm	<ul> <li>Small solarization damage</li> <li>Minimal solarization recovery</li> <li>No shelf life issues</li> <li>Diameters 100μm to 600μm available</li> <li>Available with polyimide coating only</li> </ul>	Moderate

<sup>\*</sup>The end manufacturer is responsible for bio-compatibility and sterilization testing and validation studies.

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