

# **Nufern 780 nm Select Cut-Off Single-Mode Fiber**

Nufern's 780-HP high-performance select cut-off single-mode fiber is optimized at near IR wavelengths. This applicationspecific fiber was developed for applications requiring coupler generation, diode pigtails and unique delivery needs for the near IR continuum. Compared to the best fibers available today, 780-HP fiber features higher proof test levels and tighter second mode cut-off tolerance. These features result in higher strength, increased component reliability, improved production yields and reduced costs for component manufacturers.

### **Typical Applications**

- Couplers
- · Diode pigtails

#### **Features & Benefits**

- Superior fiber geometrical tolerances Improved connectorization and coupling performance
- Extremely tight second mode cutoff tolerance Enhanced component reproducibility
- Higher proof test level Greater reliability for tight bend applications

## **Optical Specifications**

#### 780-HP

Operating Wavelength 780 - 970 nm Core NA 0.130

Mode Field Diameter (Gaussian)  $5.0 \pm 0.5 \, \text{um} @ 850 \, \text{nm}$ Cutoff

 $730 \pm 30 \text{ nm}$ 

Core Attenuation

≤ 3.5 dB/km @ 850 nm

≤ 4.0 dB/km @ 780 nm

## **Geometrical & Mechanical Specifications**

Cladding Diameter  $125.0 \pm 1.0 \, \mu m$ Core Diameter 4.4 µm Coating Diameter  $245.0 \pm 15.0 \, \mu m$ **Coating Concentricity**  $< 5.0 \mu m$ Core/Clad Offset ≤ 0.50 µm

Coating Material UV Cured, Dual Acrylate

Operating Temperature Range -55 to 85 °C

Short Term Bend Radius Long Term Bend Radius

Prooftest Level

≥ 6 mm

≥ 13 mm

≥ 200 kpsi (1.4 GN/m²)



