

Single Mode Fiber: 980 to 1600 nm

## **Description**

980HP

Thorlabs' high-performance fibers were developed for applications such as RGB components requiring generation of couplers, diode pigtails and unique delivery needs. These fibers feature greater proof test levels and a tighter second mode cutoff tolerance than standard fibers, resulting in higher strength, increased component reliability, better production yields and reduced costs for component manufacturers.

## **Specifications**

Geometrical & Mechanical	
Cladding Diameter	125 ± 1.5 μm
Coating Diameter	245 ± 15 μm
Core Diameter	3.6 µm
Core-Clad Concentricity	<0.5 μm
Coating/Clad Offset	≤5 µm
Coating Material	UV Cured, Dual Acrylate
Operating Temperature	-55 to 85 °C
Short-Term Bend Radius	≥6 mm
Long-Term Bend Radius	≥13 mm
Proof Test Level	200 kpsi (1.4 GN/m²)



Optical	
Numerical Aperture (nominal)	0.20
Attenuation	≤3.5 dB/km @ 980 nm
Operating Wavelength	980 - 1600 nm
Second Mode Cut-off	920 ± 30 nm
Mode Field Diameter (1/e² fit - near field)	4.2 ± 0.5 µm @ 980 nm
	6.8 ± 0.5 µm @ 1550 nm
Bend Loss for 100 turns @ LTBR (nominal)	<0.001 dB @ 980 nm
Bend Radius for 0.05 dB per 100 turns (nominal)	Much less than LTBR @ 980 nm
	15 mm @ 1550 nm

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