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TECHSPEC® 12.0mm Dia. x 84.0mm FL, YAG-BBAR Coated Plano-Convex Lens

YAG-BBAR Coated Plano-Convex (PCX) Lenses

Stock **#88-842** CONTACT US

Other Coating Options

- 1 + MRP ₹5,045

Price inclusive of all taxes

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Volume Pricing	
Qty 1-9	**₹5,045** each
Qty 10-24	**₹4,516** each
Qty 25-49	**₹4,036** each
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General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):
12.00 +0.0/-0.025

Centering (arcmin):
<1

Center Thickness CT (mm):
2.50 ±0.05

Edge Thickness ET (mm):
2.08

Clear Aperture CA (mm):
11

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
84.00 @ 587.6nm

Back Focal Length BFL (mm):
82.39

Coating:
YAG-BBAR (500-1100nm)

Coating Specification:
R_{abs} <0.25% @ 532nm
R_{abs} <0.25% @ 1064nm
R_{avg} <1.0% @ 500 - 1100nm

Substrate:
N-BK7

Surface Quality:
40-20

Power (P-V) @ 632.8nm:
1.5λ

Irregularity (P-V) @ 632.8nm:
λ/4

Focal Length Tolerance (%):
±1

Radius R_1 (mm):
43.43

f/#:
7

Numerical Aperture NA:
0.07

Wavelength Range (nm):
500 - 1100

Damage Threshold, By Design:
5 J/cm^2 @ 532nm, 10ns

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 235:
Compliant

Country of Origin:
Japan

Imported By:
Edmund Optics India Private Limited
267, Greystone Building, Second Floor,
6th Cross Rd, Binnamangala,
Stage 1, Indiranagar, Bengaluru,
Karnataka, India 560038
Phone: +91- 80-6845 0000

Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

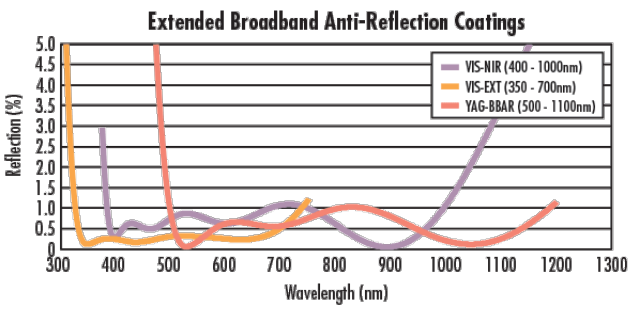
Learn more about our custom manufacturing capabilities or submit an inquiry here.

Product Details

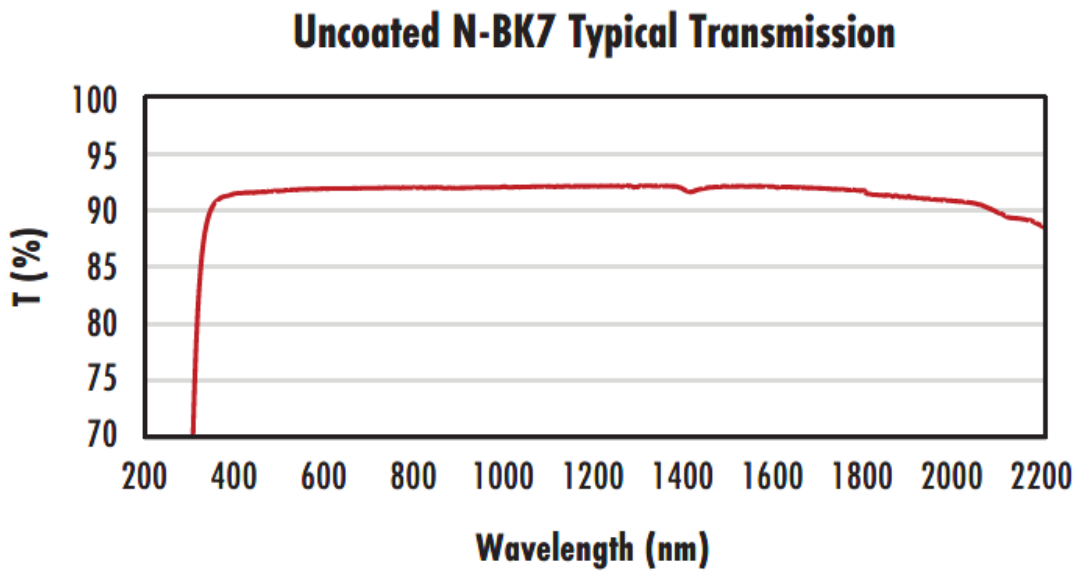
- Optimized for R<0.25% @ Both 532nm and 1064nm
- AR Coated to Provide <1.0% Reflectance per Surface for 500 - 1100nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: **Uncoated**, **MgF_2**, **VIS 0°**, **VIS-NIR**, **NIR I**, **NIR II**, and **VIS-EXT**

TECHSPEC® YAG-BBAR Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® YAG-BBAR Coated Plano-Convex (PCX) Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered **uncoated** or with broadband anti-reflective (BBAR) coatings, which include **MgF2**, **VIS 0°**, **VIS-NIR**, **NIR I**, **NIR II**, and **VIS-EXT**.

Technical Information



N-BK7



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

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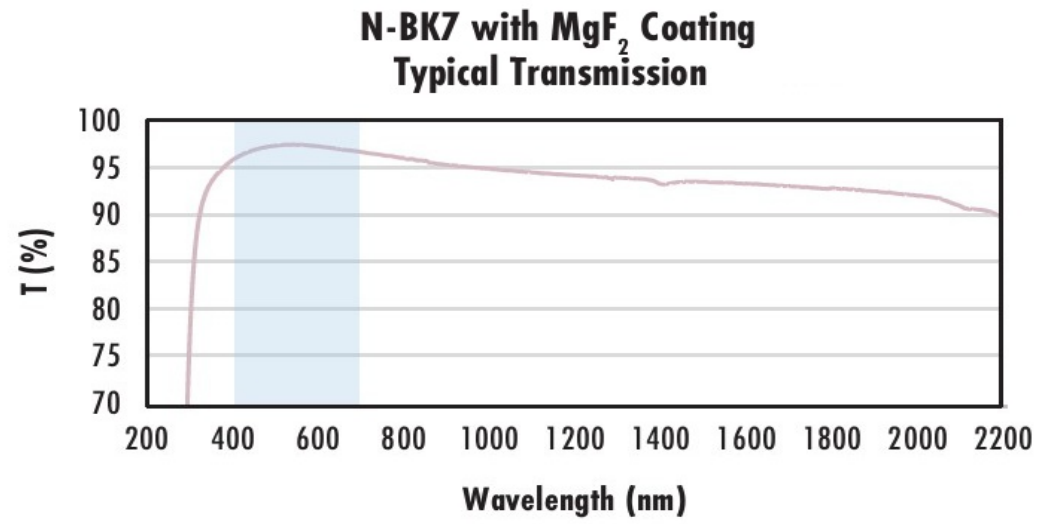

Typical transmission of a 3mm thick N-BK7 window with MgF2 (400-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 1.75\%$ @ 400 - 700nm (N-BK7)

Data outside this range is not guaranteed and is for reference only.

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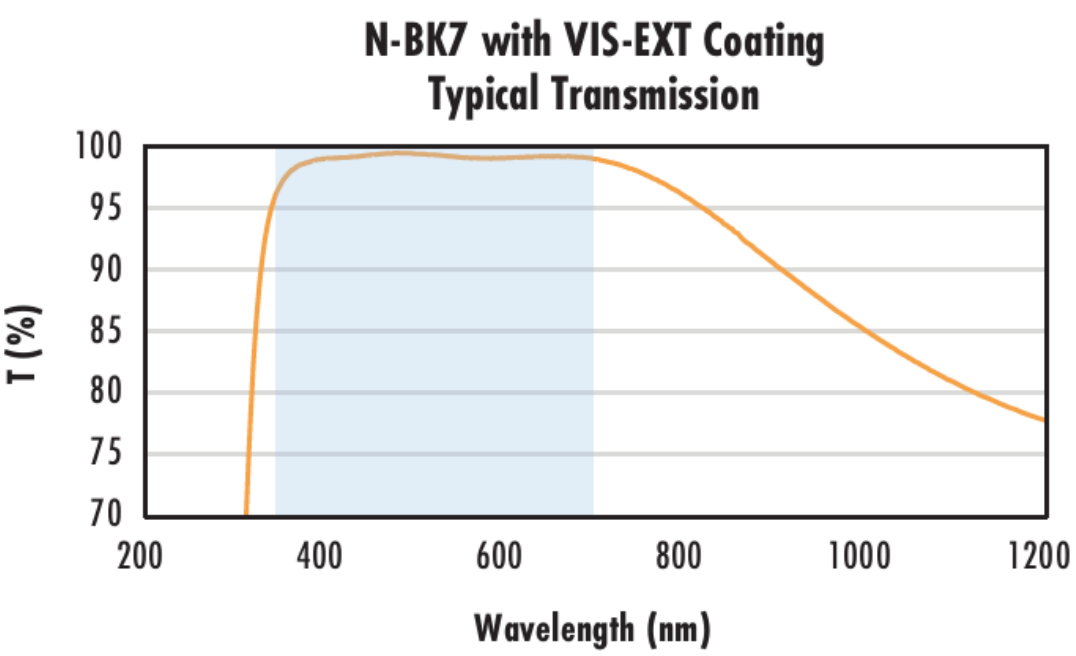

Typical transmission of a 3mm thick N-BK7 window with VIS-EXT (350-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 0.5\%$ @ 350 - 700nm

Data outside this range is not guaranteed and is for reference only.

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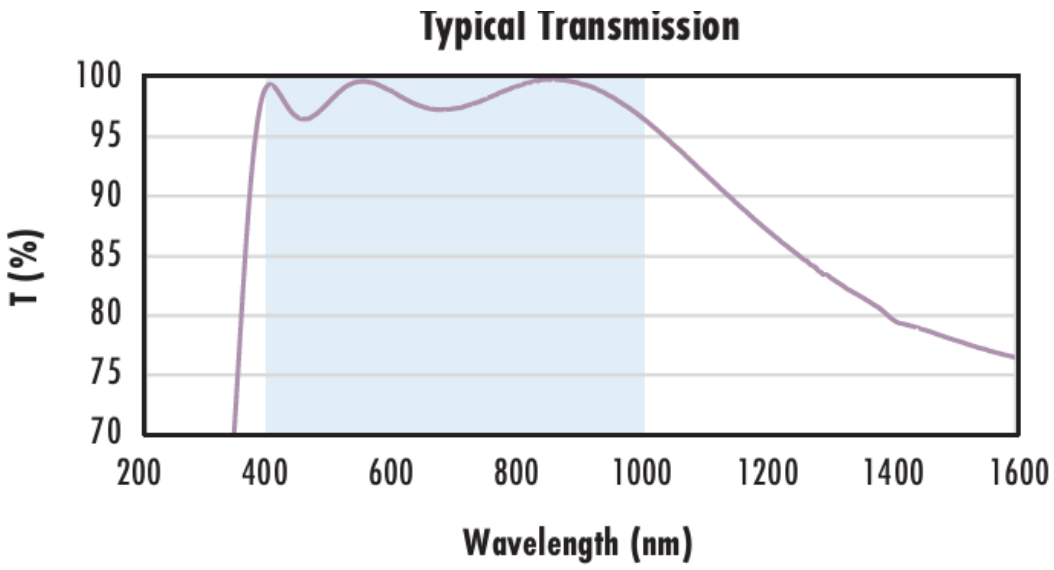
N-BK7 with VIS-NIR Coating



Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{abs} \leq 0.25\%$ @ 880nm
$R_{avg} \leq 1.25\%$ @ 400 - 870nm
$R_{avg} \leq 1.25\%$ @ 890 - 1000nm

Data outside this range is not guaranteed and is for reference only.

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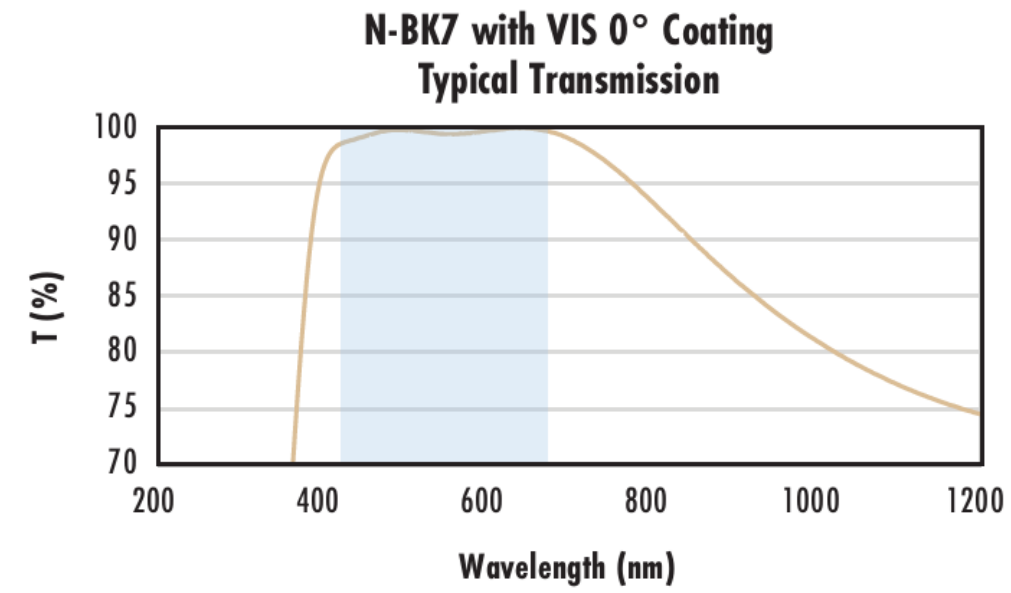

Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 0.4\%$ @ 425 - 675nm

Data outside this range is not guaranteed and is for reference only.

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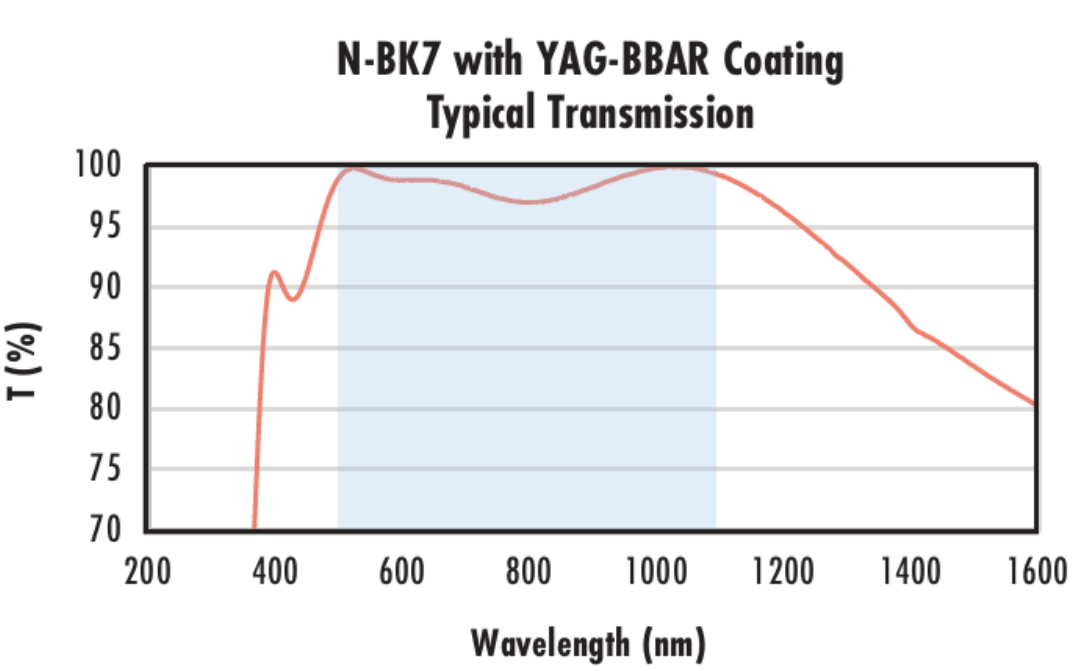

Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{abs} \leq 0.25\%$ @ 532nm
$R_{abs} \leq 0.25\%$ @ 1064nm
$R_{avg} \leq 1.0\%$ @ 500 - 1100nm

Data outside this range is not guaranteed and is for reference only.

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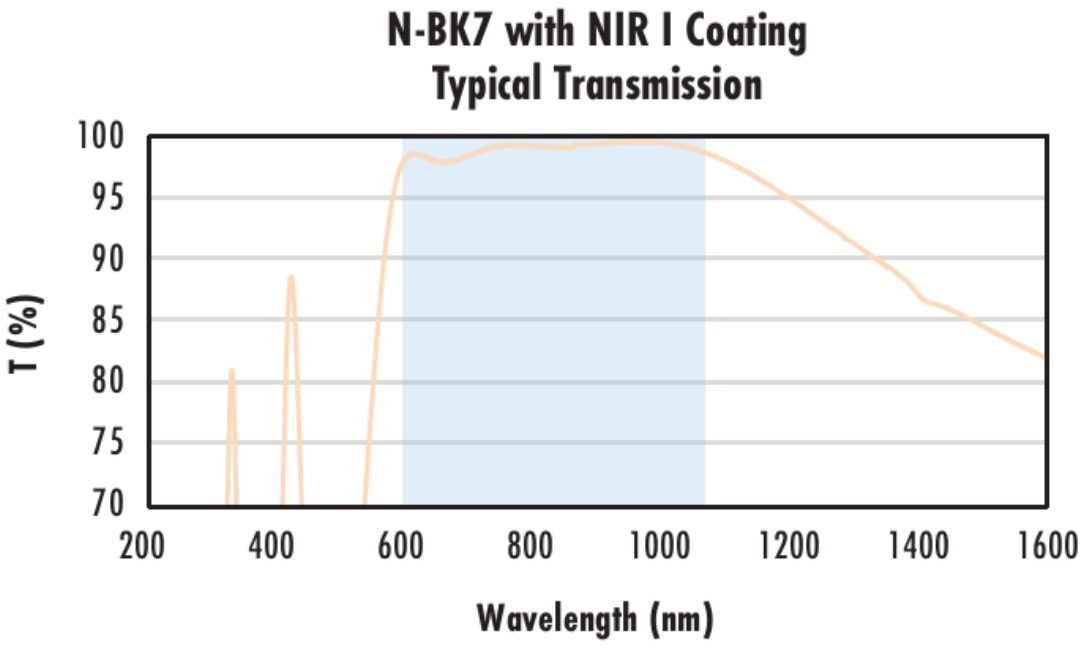

Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{avg} \leq 0.5\%$ @ 600 - 1050nm

Data outside this range is not guaranteed and is for reference only.

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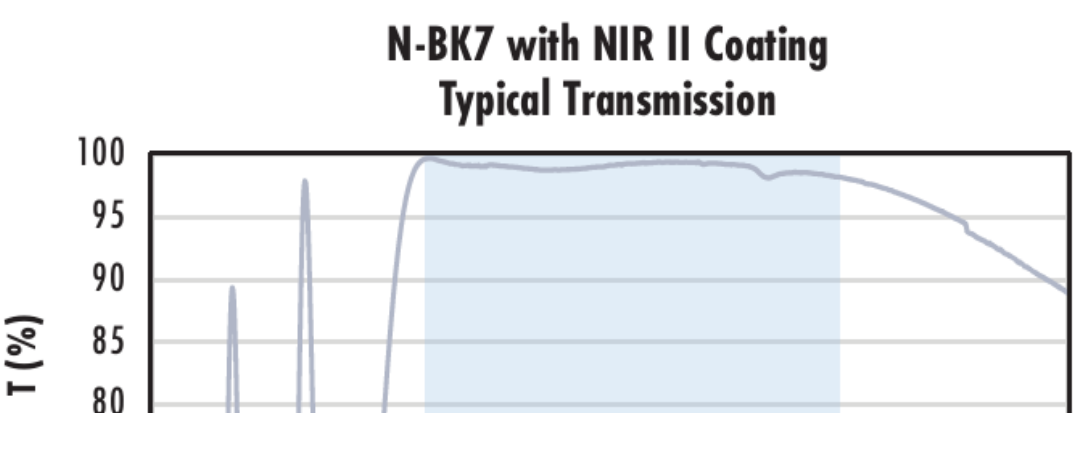
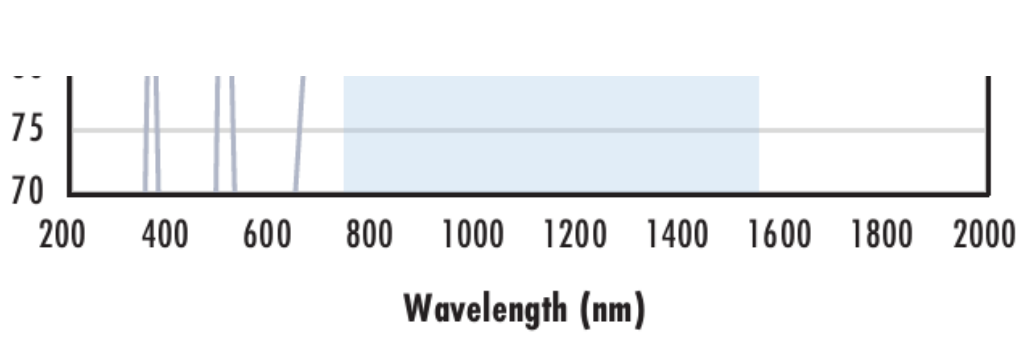


Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelengh range, with the following specification:

$R_{abs} \leq 1.5\%$ @ 750 - 800nm
$R_{abs} \leq 1.0\%$ @ 800 - 1550nm
$R_{avg} \leq 0.7\%$ @ 750 - 1550nm



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Compatible Mounts

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