# imall

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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



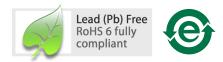
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### ADNS-6180-002 Laser Mouse wide trim Lens

## **Data Sheet**





#### Description

The ADNS-6180-002 laser mouse wide trim lens is designed for use with Avago Technologies ADNS-7700 one chip USB LaserStream<sup>™</sup> sensors. Together with the integrated VCSEL in the same package, the ADNS-6180-002 wide trim lens provides the directed illumination and optical imaging necessary for proper operation of the sensor. ADNS-6180-002 wide trim lens is a precision molded optical component and should be handled with care to avoid scratching and contamination of the optical surfaces.

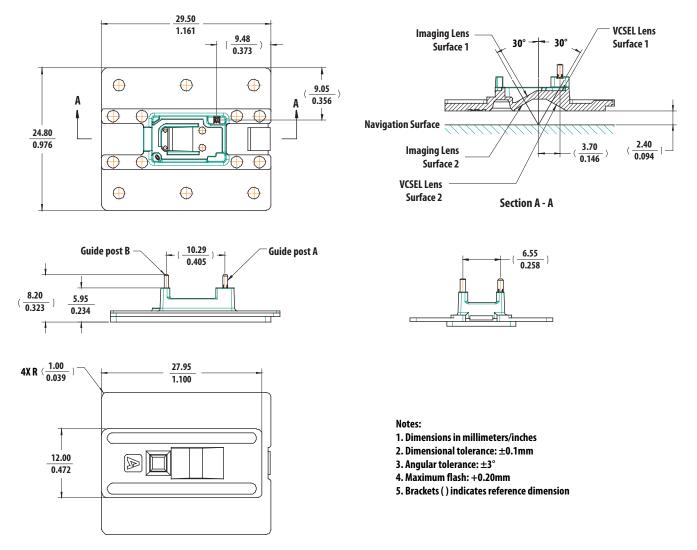


Figure 1. ADNS-6180-002 wide trim lens outline drawings and details

#### **Mechanical Assembly Requirements**

**Parameters** Symbol Min. Typ. Max. Unit Conditions Distance from Object Surface А 2.18 2.40 2.62 mm When use with ADNS-7700 to Lens Reference Plane Distance from Object Surface В 7.40 mm Sensor Aperture must be in contact to Sensor Reference Plane with lens housing surface



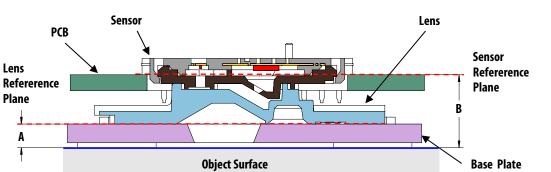


Figure 2. Optical system assembly cross-section diagram

#### Lens Design Optical Performance Specifications

All specifications are based on the Mechanical Assembly Requirements.

Parameters	Symbol	Min.	Тур.	Max.	Unit	Conditions
Design Wavelength	λ		842		nm	
Lens Material* Index of Refraction	N	1.5693	1.5713	1.5735		$\lambda = 842 \text{ nm}$

\*Lens material is polycarbonate. Cyanoacrylate based adhesives should not be used as they will cause lens material deformation.

#### Mounting Instructions for the ADNS-6180-002 Laser Mouse Wide trim Lens to the Base Plate

The STEP or IGES format drawing file with design specifications for laser mouse base plate features and lens are available. These features are useful in maintaining proper positioning and alignment of the ADNS-6180-002 wide trim lens when used with the ADNS-7700 USB LaserStream sensors. These file can be obtained by downloading from Avago technologies website or by contacting your local Avago Technologies sales representative.

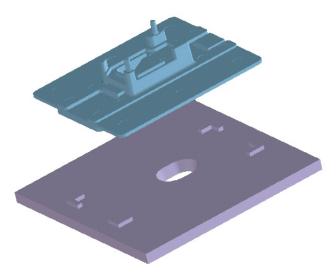


Figure 3. Illustration of base plate mounting features for ADNS-6180-002 laser mouse wide trim lens

For product information and a complete list of distributors, please go to our web site:

www.avagotech.com

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