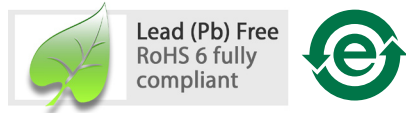


# ADNS-3150-001

## Small Form Factor Lens

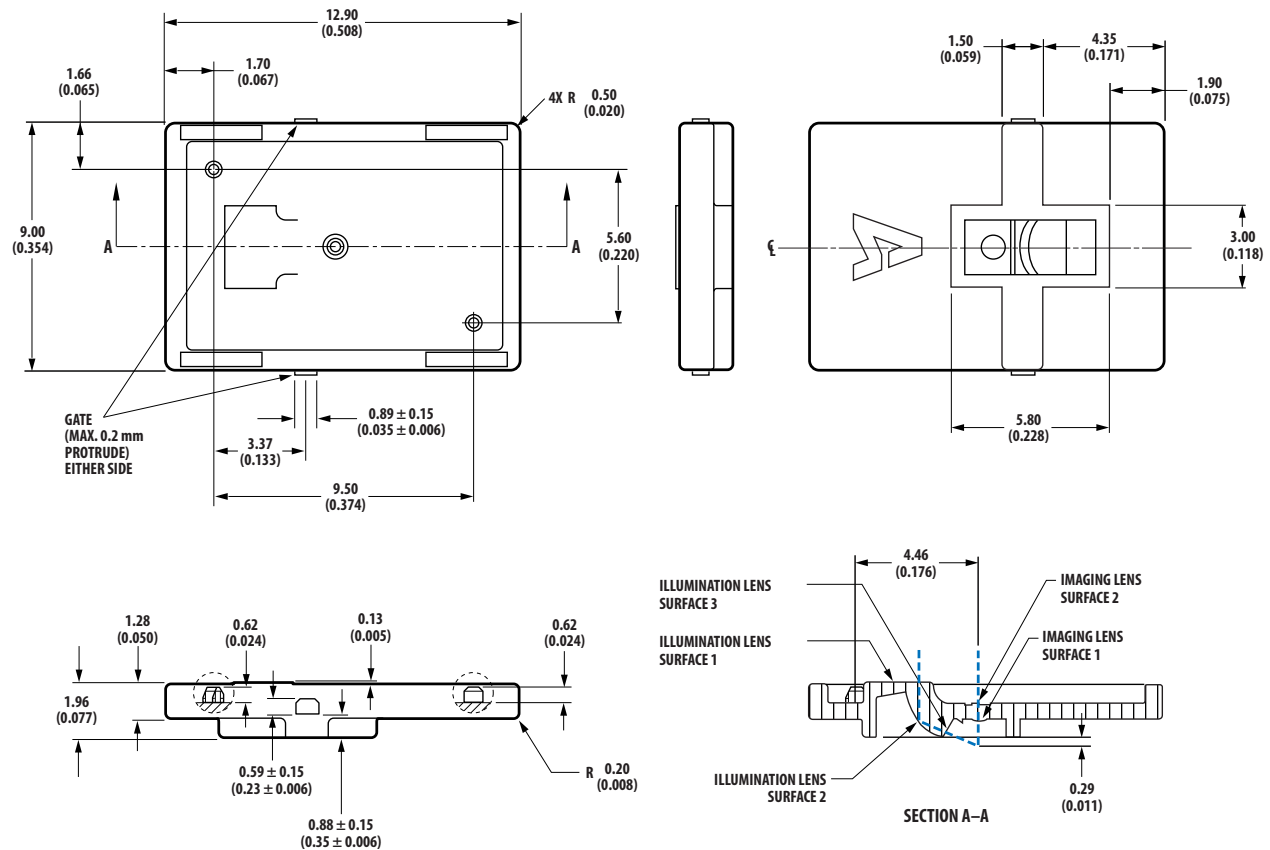


### Data Sheet



### Description

The ADNS-3150-001 small form factor (SFF) lens is designed for use with Avago Technologies ADNS-3550 integrated COB sensor. Together with the LED, the ADNS-3150-001 SFF lens provide the direct illumination and optical imaging necessary for proper operation of the sensor. ADNS-3150-001 SFF lens is a precision molded optical component and should be handled with care to avoid scratching of the optical surfaces.



- NOTES:
1. DIMENSIONS IN MILLIMETERS (INCHES).
  2. DIMENSIONAL TOLERANCE:  $\pm 0.1$  mm UNLESS OTHERWISE SPECIFIED.
  3. ANGULAR TOLERANCE:  $\pm 3^\circ$ .
  4. MAXIMUM FLASH:  $+0.2$  mm.

Figure 1. ADNS-3150-001 SFF lens outline drawings and details

## Lens Design Optical Performance Specifications

All specifications are based on the Mechanical Assembly Requirements.

	Symbol	Min.	Typical	Max.	Units	Conditions
Numerical Aperture	NA		0.1642			
Magnification			-1			Image at nominal location
Design Wavelength	$\lambda$		639		nm	
Depth of Field	DOF		$\pm 0.1$		mm	
Die Coverage Radius			0.85		mm	Image circle radius

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

## Mounting Instructions for the ADNS-3150-001 Lens to the Base Plate

An IGES format drawing file with design specifications for mouse base plate features is available.

These features are useful in maintaining proper positioning

and alignment of the ADNS-3150-001 when used with the Avago Technologies Optical Sensor. This file can be obtained by contacting your local Avago Technologies sales representative

For product information and a complete list of distributors, please go to our website: [www.avagotech.com](http://www.avagotech.com)

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