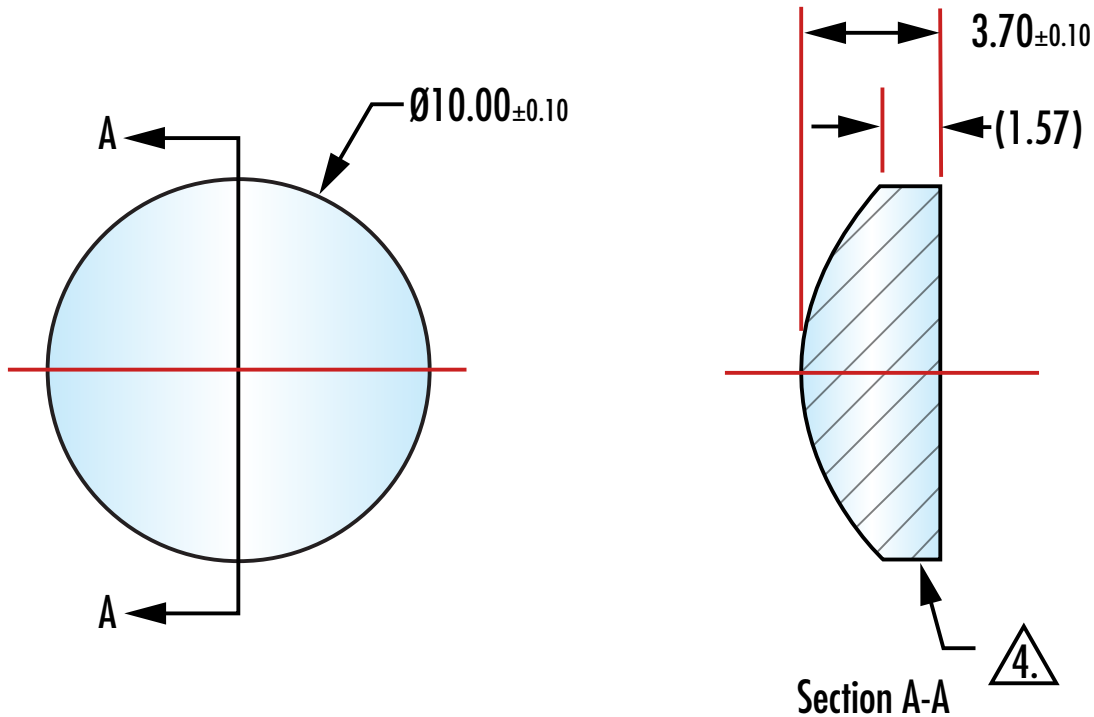


NEAR-INFRARED (NIR) ASPHERIC LENSES

TECHSPEC® NEAR-INFRARED (NIR) PRECISION ASPHERIC LENSES

TECHSPEC® Near-Infrared (NIR) Precision Aspheric Lenses are optimized to eliminate spherical aberration in the near-infrared. Manufactured from S-LAH64 or N-BK7 substrates and polished through a computer numerical controlled (CNC) process, these aspheric lenses achieve high precision performance across the NIR spectrum. These NIR aspheric lenses include uncoated substrates designed at 780nm with coating options at 350-700nm, 600-1050nm, or 900-1700nm. TECHSPEC® Near-Infrared (NIR) Precision Aspheric Lenses are available with low numerical aperture designs for applications that require beam shape to be maintained as well as high numerical aperture designs for light-gathering applications. For custom designed CNC polished aspheric lenses, please contact us.



FEATURES
CNC Polished
Eliminate Spherical Aberrations
0.75µm RMS Aspheric Figure Error
40-20 Surface Quality
10mm – 50mm Diameter Options
Designed at 780nm
Designed, Specified, and/or Manufactured by Edmund Optics®

APPLICATIONS
Laser Equipment
Detectors
Cytometers/Cell Counters
Spectrometry
Surgical Systems
Test Equipment
Imaging (Inspection, Cameras, OCT, Fluorescence)

© COPYRIGHT 2022 EDMUND OPTICS, INC. ALL RIGHTS RESERVED

NEAR-INFRARED (NIR) ASPHERIC LENSES

TECHSPEC® NEAR-INFRARED (NIR) PRECISION ASPHERIC LENSES

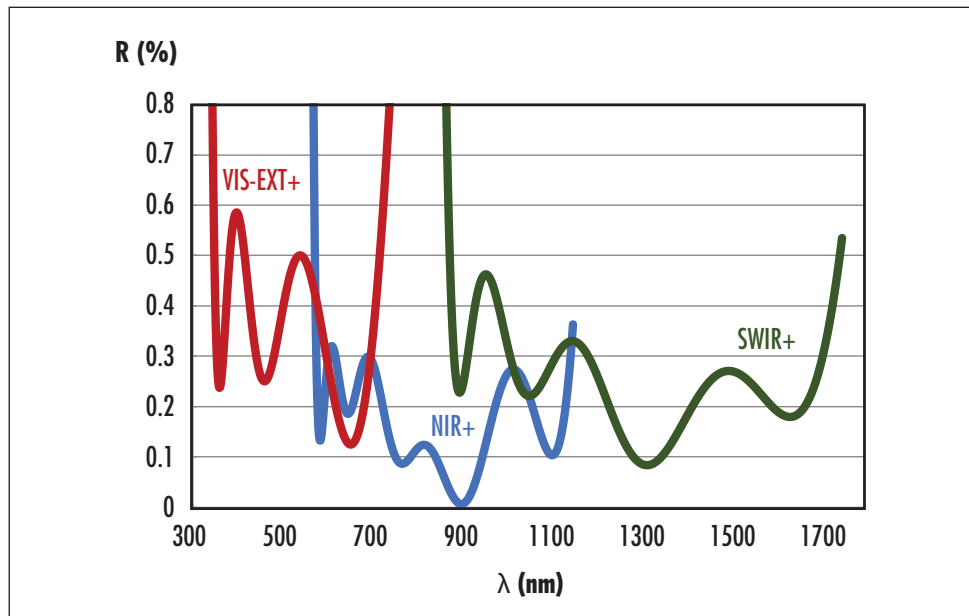
COMMON CHARACTERISTICS	
Design Wavelength	780nm
Surface Type	Aspheric
Clear Aperture	90%
Conjugate Distance	Infinite
RoHS	Compliant

UNIQUE SPECIFICATIONS

Parameter	Lower Cost	This Family	Higher Precision
	Precision	Near-Infrared (NIR) Precision	Custom Options Available
Asphere Figure Error @ 632.8nm ($\mu\text{m RMS}$)	0.75	0.75	0.016
Surface Quality	60-40	40-20	20-10
Diameter Tolerance	+0.0/-0.1	+0.00/-0.1	+0.00/-0.025
Material	L-BAL35, N-SF6, N-BK7	S-LAH64, N-BK7	S-LAH64, N-BK7
Design Wavelength (nm)	587.6	780	780

STANDARD COATING OPTIONS

Coating Name	Spectral Range (nm)	Reflection	Environmental Conditions
VIS+	350-700	$R_{\text{avg}} < 0.5\%$; $R_{\text{obs}} < 1.5\%$	MIL-PRF-13830B: Pass per C.3.8.4
NIR+	600-1050	$R_{\text{avg}} < 0.5\%$; $R_{\text{obs}} < 1.5\%$	MIL-PRF-13830B: Pass per C.3.8.4
SWIR+	900-1700	$R_{\text{avg}} < 0.5\%$; $R_{\text{obs}} < 1\%$	MIL-PRF-13830B: Pass per C.3.8.4



Custom coating options for all products are available upon request.