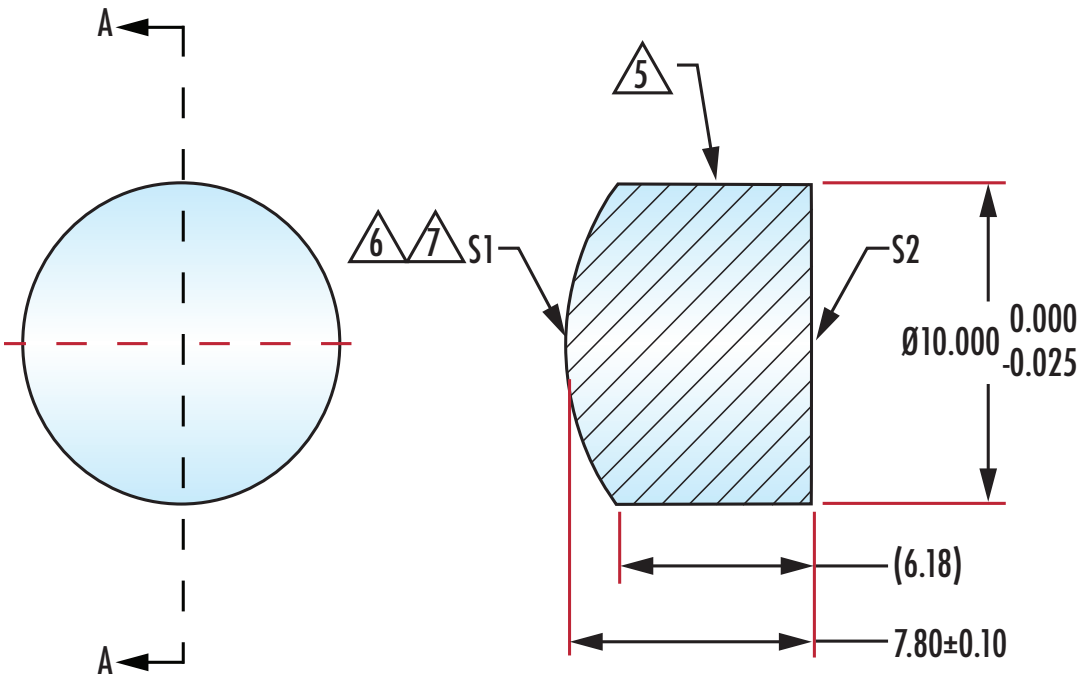
HIGH-PRECISION ASPHERIC LENSES

TECHSPEC® CNC POLISHED HIGH-PRECISION ASPHERIC LENSES WITH N-BK7 SUBSTRATES

TECHSPEC® High Precision Aspheric Lenses are CNC polished aspheric lenses that feature a 0.25µm RMS aspheric figure error. The precision aspheric figure error makes these lenses ideal for applications that re-quire spherical aberration correction, including imaging and laser fo-cusing applications. These aspheric lenses can also be used to replace multiple spherical elements in optical assem-blies to reduce weight and cost. TECHSPEC® High Precision Aspheric Lenses are available with diameters from 10 to 50mm and high numerical apertures to maximize light throughput.



Section A-A

FEATURES
CNC Polished
Eliminate Spherical Aberrations
0.25µm RMS Aspheric Figure Error
40-20 Surface Quality
10mm – 50mm Diameter Options
High Numerical Apertures
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)

TECHSPEC® NEAR-INFRARED (NIR) PRECISION ASPHERIC LENSES

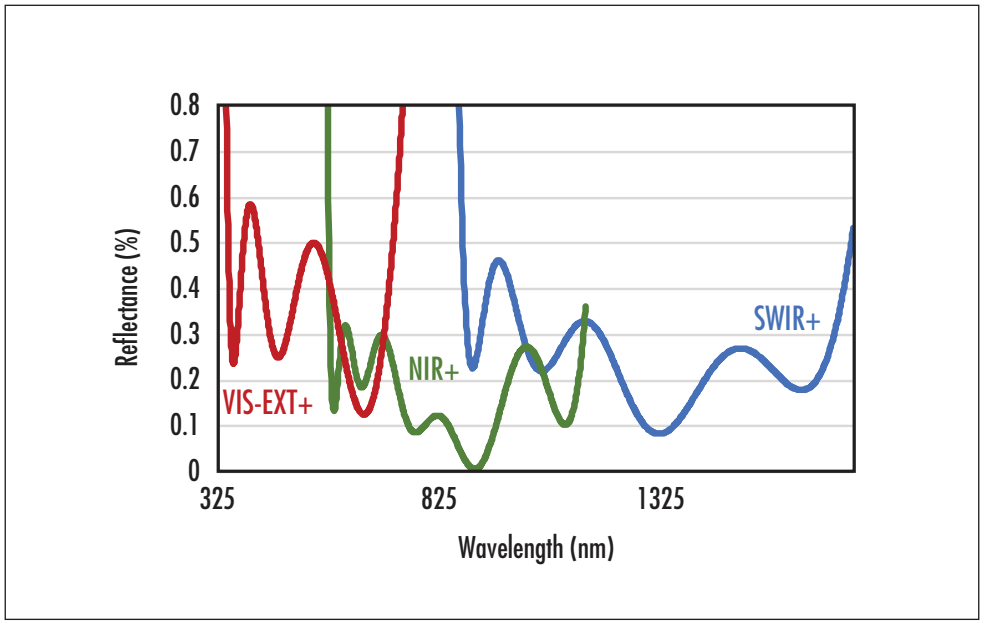
COMMON CHARACTERISTICS	
Design Wavelength	587.6nm
Surface Type	Aspheric
Clear Aperture	90%
Conjugate Distance	Infinite
RoHS	Compliant

UNIQUE SPECIFICATIONS

Parameter	Lower Cost	This Family	Higher Precision
	Precision	High-Precision	λ/40
Asphere Figure Error @ 632.8nm (μm RMS)	0.75	0.25	0.016
Surface Quality	60-40	40-20	40-20
Diameter Tolerance	+0.0/-0.1	+0.00/-0.025	+0.00/-0.025
Material	L-BAL35, N-SF6, N-BK7	N-SF5,N-SF6, N-BK7	N-SF5,N-SF6, N-BK7

STANDARD COATING OPTIONS

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



Custom coating options for all products are available upon request.