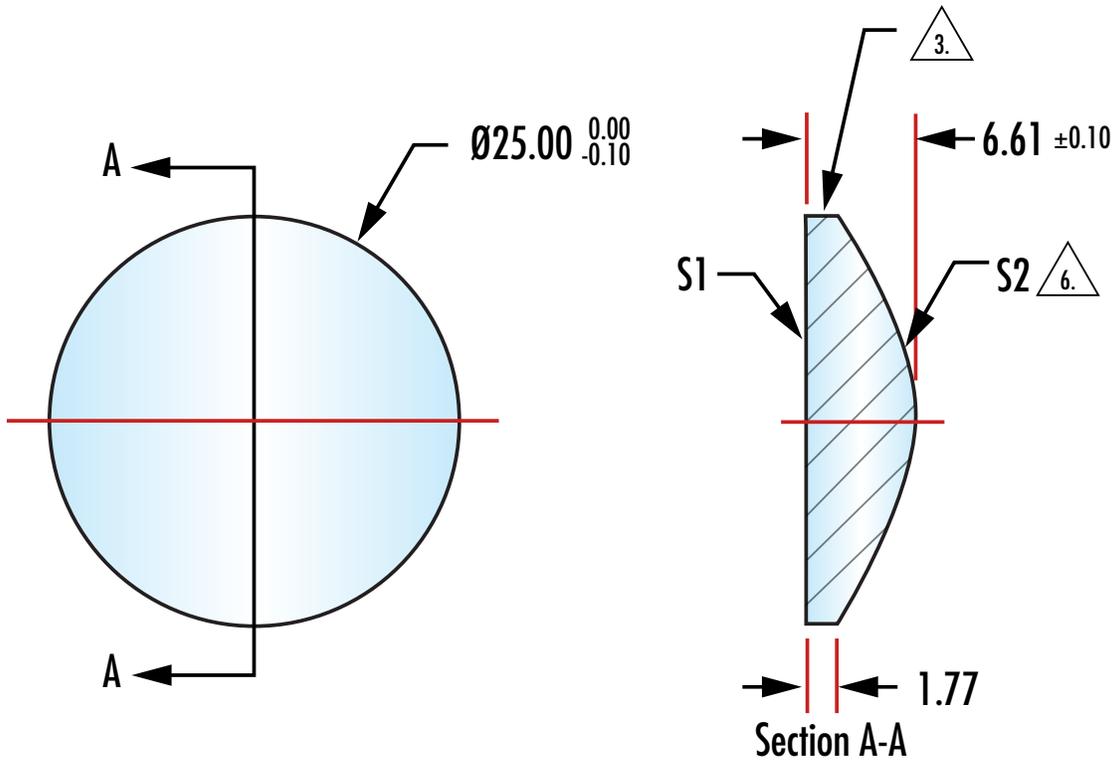


# λ/40 BEST FORM ASPHERIC LENSES

## TECHSPEC® DIFFRACTION-LIMITED SPOT SIZE LENSES

TECHSPEC® Best Form Aspheric Lenses are TECHSPEC® PCX Lenses that have been modified to provide superior performance at specified wavelengths. Unlike the preexisting TECHSPEC® PCX lens, TECHSPEC® Best Form Aspheric Lenses produce diffraction-limited spot sizes at the design wavelength, which is ideal for focusing or collimating applications. Any diameter and focal length TECHSPEC® PCX Lens can be modified to become a TECHSPEC® Best Form Aspheric Lens in order to provide the best solution for any application.

**Note:** Unlike traditional focusing lenses, these lenses should be used with the plano side facing the light source.



| FEATURES   |
|--|
| CNC Polished   |
| Eliminate Spherical Aberrations                            |
| Diffraction-Limited Spot Sizes at Common Laser Wavelengths |
| 40-20 Surface Quality                                      |
| 25mm – 100mm 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) |

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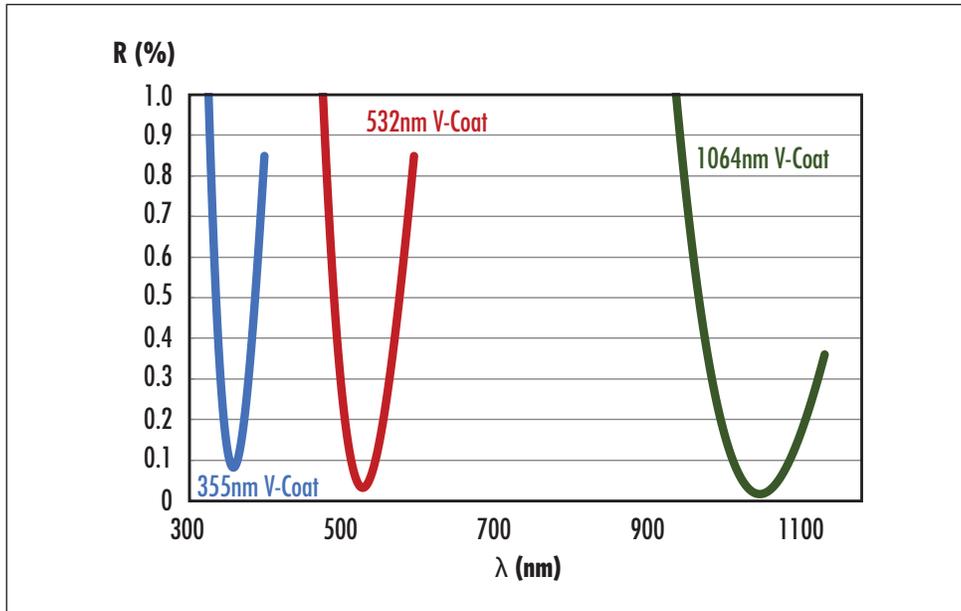
| COMMON CHARACTERISTICS |                 |
|------------------------|-----------------|
| Design Wavelength      | 532nm or 1064nm |
| Clear Aperture         | 90%             |
| Conjugate Distance     | Infinite        |
| RoHS                   | Compliant       |

### UNIQUE SPECIFICATIONS

| Parameter                               | Lower Cost            | This Family  | Higher Precision |
|---|-----------------------|--------------|------------------|
|   | λ/40                  | Best Form    | λ/40 Laser Grade |
| Asphere Figure Error @ 632.8nm (μm RMS) | 0.016                 | 0.016        | 0.016            |
| Surface Quality                         | 40-20                 | 10-5         | 10-5             |
| Diameter Tolerance                      | +0.0/-0.025           | +0.00/-0.05  | +0.00/-0.05      |
| Material                                | L-BAL35, N-SF6, N-BK7 | Fused Silica | Fused Silica     |

### COMMONLY SELECTED COATINGS

| Coating Name        | Spectral Range (nm) | Reflection         | Environmental Conditions         |
|---------------------|---------------------|--------------------|----------------------------------|
| 355nm Laser V-Coat  | 355                 | $R_{obs} < 0.25\%$ | MIL-PRF-13830B: Pass per C.3.8.4 |
| 532nm Laser V-Coat  | 532                 | $R_{obs} < 0.25\%$ | MIL-PRF-13830B: Pass per C.3.8.4 |
| 1064nm Laser V-Coat | 1064                | $R_{obs} < 0.25\%$ | MIL-PRF-13830B: Pass per C.3.8.4 |



Custom coating options for all products are available upon request.