

[See all 16 Products in Family](#)

TECHSPEC® 12mm Dia. x 15mm FL, VIS Coated, Hybrid Asphere



TECHSPEC® Plastic Hybrid Aspheric Lenses

Stock #65-998 CLEARANCE **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ **S\$106⁴⁰**

ADD TO CART

Volume Pricing	
Qty 1+	S\$106.40 each
Need More?	Request Quote

Product Downloads

General

Aspheric Lens Type:

Physical & Mechanical Properties

12.00 +0.00/-0.10 Diameter (mm):

10.00 Clear Aperture CA (mm):

2.29 Edge Thickness ET (mm):

Center Thickness CT (mm):
3.70 ±0.10

Bevel:
Protective as needed

Shape of Back Surface:
Convex

Optical Properties

Effective Focal Length EFL (mm):
15.00 @ 587.6nm

Numerical Aperture NA:
0.40

Back Focal Length BFL (mm):
12.95

Substrate:
Zeonex E48R

Aspheric Design Wavelength (nm):
587.6

Coating:
BBAR (425-675nm)

Coating Specification:
R_{avg} ≤ 0.75% @ 425 - 675nm

Surface Quality:
60-40

f#:
1.25

Radius R₂ (mm):
48.3

Wavelength Range (nm):
425 - 675

Conjugate Distance:
Infinite

Environmental & Durability Factors

Operating Temperature (°C):
-30 to +70

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Reach 209:
[Compliant](#)

Certificate of Conformance:
[View](#)

Product Details

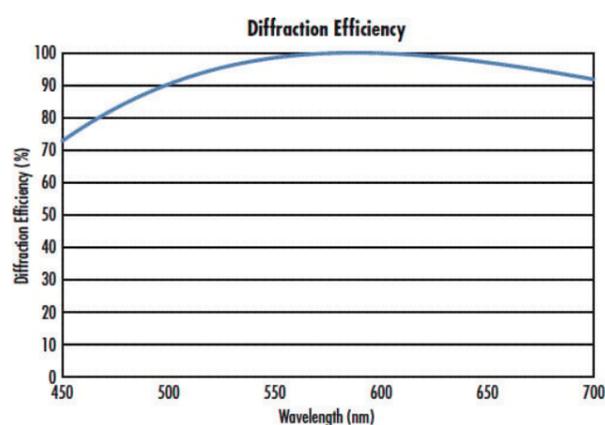
- Color-Corrected Plastic Aspheres
- Diffractive Surface Minimizes Chromatic Aberration
- Low-Cost, Molded Design

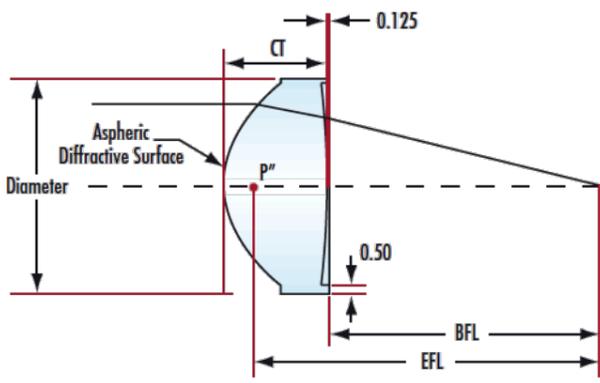
TECHSPEC® Plastic Hybrid Aspheric Lenses are molded aspheric lenses with diffraction-limited designs that eliminate chromatic aberrations caused by broadband light sources. These hybrid aspheric lenses are ideal for imaging or ophthalmic applications, or for use with tunable lasers or broadband or multispectral illumination sources. The [aspheric lens](#) eliminates spherical aberration, while the diffractive surface features a negative optical dispersion to yield excellent color correction.

TECHSPEC Plastic Hybrid Aspheric Lenses are similar in performance, but offer several advantages to our [TECHSPEC Aspherized Achromatic Lenses](#). Hybrid aspheric lenses feature all-plastic, monolithic designs that are much lighter than comparable aspherized achromatic lenses. These optical lenses are also available in higher numerical apertures. However, plastic hybrid aspheric lenses are limited by the inherent diffraction efficiency of the aspheric surface, yielding lower overall transmission than comparable aspherized achromatic lenses.

These lenses won the 2011 Prism Award for Optics and Optical Components.

Technical Information





Compatible Mounts