## ZINC SELENIDE(ZnSe) PLANO-CONCAVE LENSES

These plano-concave lenses are manufactured CVD grown Zinc Selenide. They have a low absorption in the infra-red. Negative focusing Zinc Selenide lenses are perfect for thermal imaging and Carbon Dioxide laser focusing applications.

We supply uncoated but a range of anti-reflection coatings can be applied as well for CO2 laser applications.

## Standard Specifications:

Optical Material: Laser Grade CVD Zinc Selenide

Diameter Tolerance: +0.0, -0.15mm

Design Wavelength: 10.6um

Design Index: 2.4028 at 10.6um

Paraxial Focal Length: ±2%

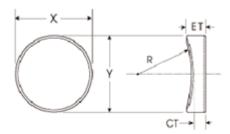
Centration: 3 arc minutes

Clear Aperture: >85%

Surface Quality: 40-20 scratch and dig Wavefront Distortion: lambda/2 at 632.8nm

Bevel: <0.25mm X 45°

Coating: available upon request



## Standard Zinc Selenide Plano-Concave Lenses:

| Dia(mm) | f(mm)   | R1(mm) | te(mm) | tc(mm) | Product Number |
|---------|---------|--------|--------|--------|----------------|
| 15.20   | -38.10  | 53.45  | 2.9    | 2.0    | UQT-PLCAZ0401  |
| 20.00   | -50.80  | 71.26  | 2.9    | 2.0    | UQT-PLCAZ0402  |
| 20.00   | -63.50  | 89.08  | 2.9    | 2.0    | UQT-PLCAZ0403  |
| 25.40   | -38.10  | 53.45  | 4.5    | 3.0    | UQT-PLCAZ0404  |
| 25.40   | -63.50  | 89.08  | 3.9    | 3.0    | UQT-PLCAZ0405  |
| 25.40   | -76.20  | 107.93 | 3.8    | 3.0    | UQT-PLCAZ0406  |
| 28.00   | -50.80  | 71.26  | 4.4    | 3.0    | UQT-PLCAZ0407  |
| 28.00   | -63.50  | 89.08  | 4.1    | 3.0    | UQT-PLCAZ0408  |
| 28.00   | -127.00 | 178.15 | 3.5    | 3.0    | UQT-PLCAZ0409  |
| 38.10   | -63.50  | 89.08  | 8.0    | 6.0    | UQT-PLCAZ0410  |
| 38.10   | -76.20  | 107.93 | 7.7    | 6.0    | UQT-PLCAZ0411  |
| 38.10   | -127.00 | 178.15 | 7.0    | 6.0    | UQT-PLCAZ0412  |
| 38.10   | -190.50 | 267.23 | 6.7    | 6.0    | UQT-PLCAZ0413  |
| 50.80   | -127.00 | 178.15 | 9.8    | 8.0    | UQT-PLCAZ0414  |
| 50.80   | -190.50 | 267.23 | 9.2    | 8.0    | UQT-PLCAZ0415  |

Please Contact ultiQuest for other dimensions in prototype and production quantities.

## NOTES!

■ ZnSe reacts readily with acidic substances, generating toxic selenium oxide gas. Never clean with acidic washing solutions.

- Note that ZnSe is classified as a toxic material by law. Transactions involving ZnSe or products incorporating ZnSe require a certificate of transfer.
- Disposal of ZnSe optics as general waste is prohibited. Please notify us if you need to dispose of such products. (Ultiquest Technolgies products only.)
- Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.