

NOTES:

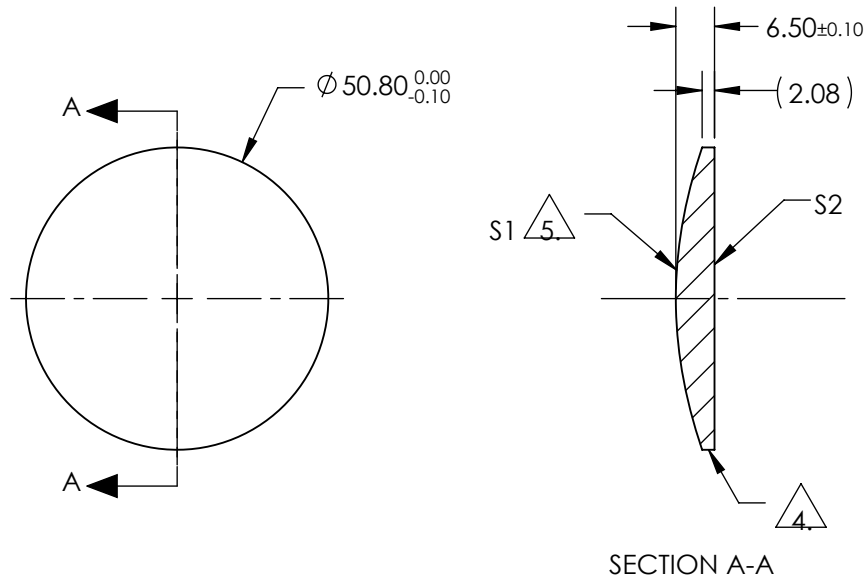
- SUBSTRATE:  
II-VI Infrared ZnSe
- CENTERING TOLERANCE:  
EDGE THICKNESS VARIATION MEASURED AT THE CLEAR APERTURE OF S1 NOT TO EXCEED 12.7μm
- COATING (APPLY ACROSS COATING APERTURE):  
S1 & S2: NONE

4. FINE GRIND SURFACE

5. ASPHERIC SURFACE DESCRIBED BY THE FOLLOWING EQUATION AND COEFFICIENTS SHOWN IN TABLE BELOW

$$Z_{ASPH}(Y) = \frac{(\frac{1}{RADIUS}) * Y^2}{1 + \sqrt{1 - (1+k) * (\frac{1}{RADIUS})^2 * Y^2}} + D * Y^2 + E * Y^4 + F * Y^6 + G * Y^8 + H * Y^{10} + J * Y^{12} + L * Y^{14}$$

- SURFACE ROUGHNESS: 50 Å



COEFFICIENT TABLE 5.

| COEFFICIENT   | S1            |
|---------------|---------------|
| SEMI-DIAMETER | 2.540000E+01  |
| (1/RADIUS)    | 1.403312E-02  |
| k             | -1.279984E+00 |
| D             | 0.000000E+00  |
| E             | -1.498164E-07 |
| F             | -1.970050E-11 |
| G             | 6.329852E-15  |
| H             | 0.000000E+00  |
| J             | 0.000000E+00  |
| L             | 0.000000E+00  |

|                         | S1                   | S2                   |
|-------------------------|----------------------|----------------------|
| SHAPE                   | CONVEX               | PLANO                |
| RADIUS                  | 71.260               | INFINITY             |
| SURFACE QUALITY         | 40-20                | 40-20                |
| CLEAR APERTURE          | Ø45.72               | Ø45.72               |
| POWER at 632.8nm        | 2.0 RINGS            | 2.0 RINGS            |
| IRREGULARITY at 632.8nm | 1.0 RING             | 1.0 RING             |
| BEVEL                   | PROTECTIVE AS NEEDED | PROTECTIVE AS NEEDED |

|                 |         |
|-----------------|---------|
| EFL (AT 10.6μm) | (50.80) |
| BFL (AT 10.6μm) | (48.10) |



ALL DIMS IN mm



Edmund Optics®

| TITLE  | 50.8mm Dia. x 50.8mm FL Uncoated, Zinc Selenide Aspheric Lens |
|--------|---------------------------------------------------------------|
| DWG NO | 39496                                                         |
| SHEET  | 1 OF 1                                                        |

**FOR INFORMATION ONLY:  
DO NOT MANUFACTURE  
PARTS TO THIS DRAWING**

SPECIFICATIONS SUBJECT TO CHANGE  
WITHOUT NOTICE  
DIMENSIONS ARE FOR REFERENCE ONLY