

NOTES:

1. SUBSTRATE:  
ELEMENT A: N-LAK8  
ELEMENT B: N-SF57
2. CENTERING: 3-5 ARCMIN
3. COATING:  
S1: R(AVG) ≤ 0.4% FROM 425-675nm @ 0° AOI  
S2, S3, & S4: NONE

4. FINE GRIND SURFACE

5. ELEMENTS TO BE CEMENTED WITH NORLAND OPTICAL ADHESIVE  
NOA 61

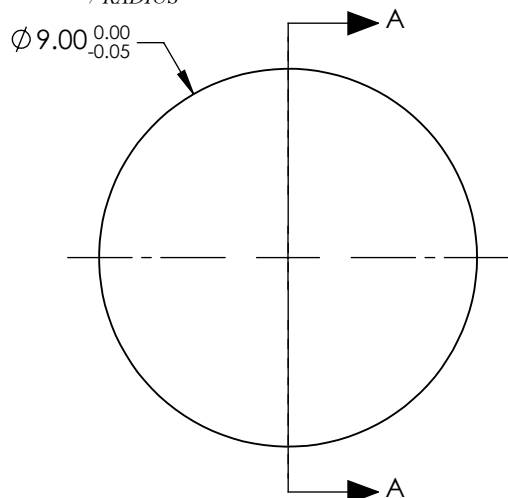
6. POLYMER ASPHERE APPLIED TO S4 OF ACHROMAT:

MATERIAL:  $n_d=1.517$ ,  $V_d=52.0$

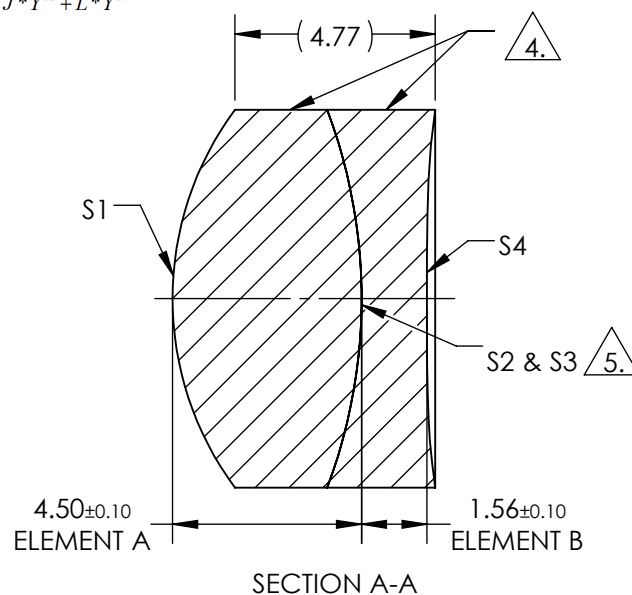
CENTER THICKNESS: 0.060mm ADDED TO S4

CLEAR APERTURE(CENTERED ON S4 WITH NO MACRO DEFECTS):

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



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE  
DIMENSIONS ARE FOR REFERENCE ONLY



COEFFICIENT TABLE 6.

| COEFFICIENT   | S1            |
|---------------|---------------|
| SEMI-DIAMETER | 4.000000E+00  |
| (1/RADIUS)    | -0.150142E-02 |
| k             | 0.000000E+00  |
| D             | 0.000000E+00  |
| E             | 7.018778E-04  |
| F             | -9.192695E-06 |
| G             | 0.000000E+00  |
| H             | 0.000000E+00  |
| J             | 0.000000E+00  |
| L             | 0.000000E+00  |

|                    | S1                   | S2                   | S3                   | S4                   |
|--------------------|----------------------|----------------------|----------------------|----------------------|
| SHAPE              | CONVEX               | CONVEX               | CONCAVE              | CONCAVE              |
| RADIUS             | 7.56                 | 12.80                | 12.80                | 666.03 6.            |
| SURFACE QUALITY    | 60-40                | 60-40                | 60-40                | 60-40                |
| MIN CLEAR APERTURE | Ø8.10                | Ø8.10                | Ø8.10                | Ø7.00                |
| BEVEL MAX FACE     | PROTECTIVE AS NEEDED | PROTECTIVE AS NEEDED | PROTECTIVE AS NEEDED | PROTECTIVE AS NEEDED |

EFL: 12.00mm

BFL: 8.162mm



ALL DIMS IN

mm



Edmund Optics®

TITLE

9mm DIAMETER x 12mm EFL ASPHERIZED  
ACHROMATIC LENS

DWG NO

49656

SHEET  
1 OF 1

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