

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

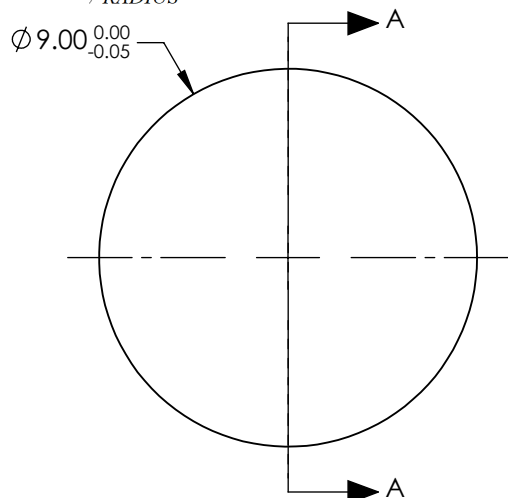
6. POLYMER ASPHERE APPLIED TO S4 OF ACHROMAT:

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

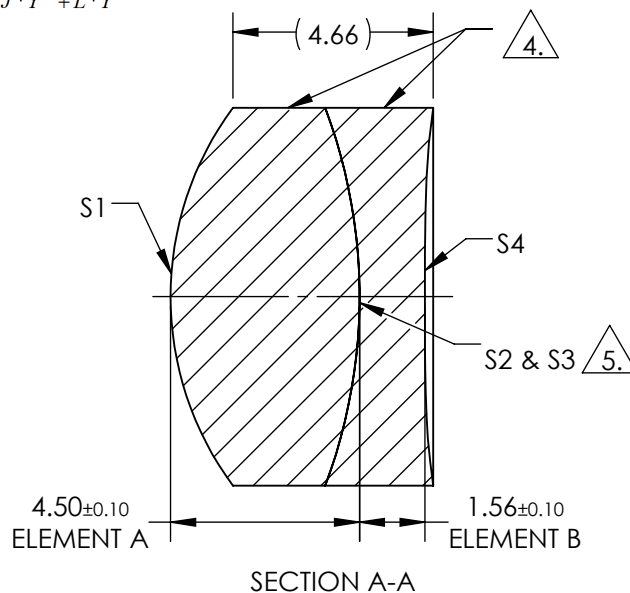
CENTER THICKNESS: 0.060mm ADDED TO S4

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

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



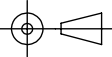
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
DIMENSIONS ARE FOR REFERENCE ONLY



COEFFICIENT TABLE 6.

COEFFICIENT	S4
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	(*)
RADIUS	7.56	12.80	12.80	666.03 6.
SURFACE QUALITY	60-40	60-40	60-40	80-50
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	 Edmund Optics®		
BFL: 8.162mm			
THIRD ANGLE PROJECTION 	TITLE	9mm DIAMETER x 12mm EFL ASPHERIZED ACHROMATIC LENS	
ALL DIMS IN mm	DWG NO	49656	SHEET 1 OF 1

* - Convex at vertex then changes to Concave

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