

ASPHERIC COEFFICIENTS

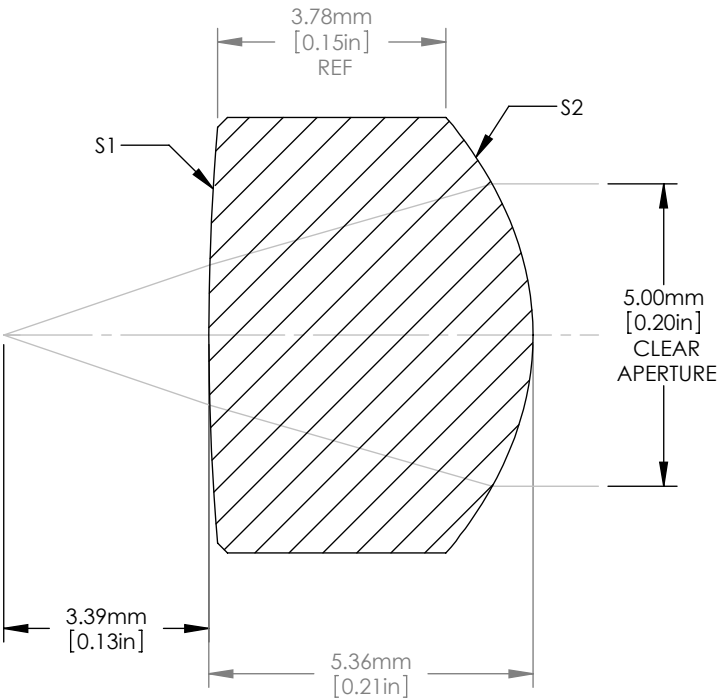
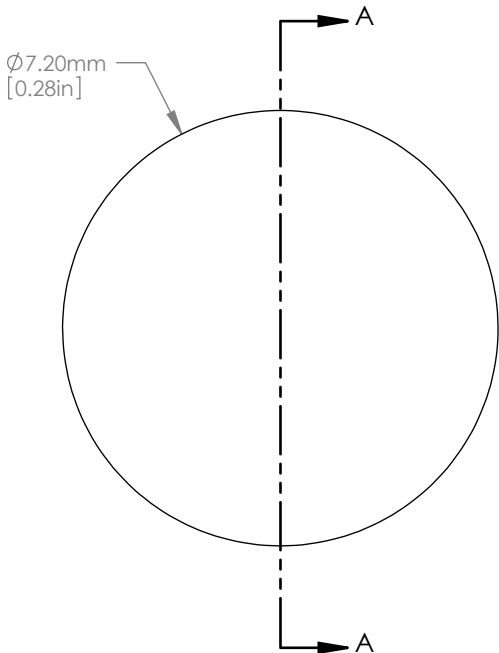
	R	k	A ₂	A ₄	A ₆	A ₈	A ₁₀
S1	41.07	-	-	-	-	-	-
S2	-4.76	-1.256813	-	-7.7454042E-04	1.9209200E-06	1.7823124E-07	-

$$z = \frac{Y^2}{R(1 + \sqrt{1 - (1 + k)Y^2 / R^2})} + A_2Y^2 + A_4Y^4 + A_6Y^6 + A_8Y^8 + A_{10}Y^{10}$$

ASPHERIC LENS
EQUATION



ISOMETRIC VIEW
1 : 1



SECTION A-A
SCALE 8 : 1

NOTES/SPECIFICATIONS:

1.

DESIGN WAVELENGTH: 780nm
2.

EFFECTIVE FOCAL LENGTH: 6.24mm
3.

EFL TOLERANCE: ±1%
4.

NUMERICAL APERTURE: 0.40
5.

WORKING DISTANCE: 3.39mm
6.

DIAMETER TOLERANCE: ±0.015mm
7.

CENTER THICKNESS TOLERANCE: ±0.04mm
8.

LASER WINDOW THICKNESS: 0.275mm (N-BK7)
9.

SURFACE QUALITY: 60-40 SCRATCH-DIG (INCLUDES ENTIRE BULK MATERIAL)
10.

RMS WFE(TYPICAL): 0.043 WAVES
11.

MAGNIFICATION: INFINITE
12.

REFRACTIVE INDEX (AT DESIGN WAVELENGTH): 1.719
13.

COATING(S1&S2): BBAR Ravg<0.5% FROM 350-700nm

FOR INFORMATION ONLY
NOT FOR MANUFACTURING PURPOSES

DRAWING PROJECTION					THORLABS www.thorlabs.com	
	NAME	DATE				
DRAWN	SES	13/DEC/10	-A COATED ASPHERIC COLLIMATING LENS EFL=6.24mm			
APPROVAL	PM	25/MAR/13	MATERIAL			REV
COPYRIGHT © 2010 BY THORLABS			H-LAK54			E
VALUES IN PARENTHESIS ARE CALCULATED AND MAY CONTAIN ROUND OFF ERRORS			ITEM #		APPROX WEIGHT	
			A110-A		0.1g	