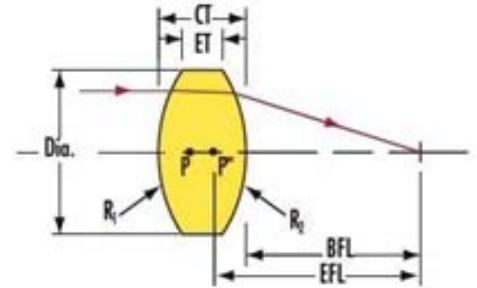


# Bi-Convex Glass lens



Material Option: N-BK7,UV Fused silica,N-SF11,N-SF5  
 Focal Length Tolerance:  $\pm 1\%$   
 Diameter Tolerance:  $+0.00/-0.05\text{mm}$   
 Clear Aperture: 90%  
 Center Thickness Tolerance:  $\pm 0.20\text{mm}$   
 Centration Tolerance:  $<0.05\text{mm}$   
 Scratch/Dig: 20-10  
 Surface Irregularity:  $\lambda/10$  @633nm  
 Coating option: Uncoated, VIS, NIR, SWIR, UV



## ORDERING INFORMATION

Product code	Diameter	Focal length	Material	Coating
BICX	D	f	N-SF11 N-BK7 UV FS	None VIR NIR SWIR UV

## COMMON PRODUCT LIST

Part Number	Diameter $\varnothing$ (mm)	Focal Length (mm)	Material	CT (mm)
BICX-D10-f10-BK7	10	10	N-BK7	4.8
BICX-D10-f10-UV		10	UV FS	5
BICX-D10-f10-SF5		10	N-SF5	3.5
BICX-D10-f12.5-BK7		12.5	N-BK7	3.63
BICX-D10-f15-BK7	10	15	N-BK7	3.5
BICX-D10-f20-BK7		20		
BICX-D10-f25-BK7		25		
BICX-D10-f30-BK7		30		
BICX-D10-f40-BK7		40		
BICX-D10-f50-BK7		50		
BICX-D10-f100-BK7		100		
BICX-D12.7-f12.7-BK7		12.7		
BICX-D12.7-f15-BK7	15		4.7	
BICX-D12.7-f20-BK7	20		3.9	
BICX-D12.7-f25-BK7	25		3.4	
BICX-D12.7-f30-BK7	30		3.1	
BICX-D12.7-f40-BK7	40		2.8	
BICX-D12.7-f50-BK7	50		2.6	
BICX-D12.7-f100-BK7	100		2.2	

## Bi-Convex Glass lens

Part Number	Diameter Ø (mm)	Focal Length (mm)	Material	CT (mm)
BICX-D12.7-f12.7-UV	12.7	12.7	UV FS	6.26
BICX-D12.7-f15-UV		15		5.9
BICX-D12.7-f20-UV		20		4.2
BICX-D12.7-f25-UV		25		3.6
BICX-D12.7-f30-UV		30		3.3
BICX-D12.7-f40-UV		40		2.9
BICX-D12.7-f50-UV		50		2.7
BICX-D25.4-f25.4-BK7	25.4	25.4	N-BK7	9
BICX-D25.4-f30-BK7		30		7.7
BICX-D25.4-f35-BK7		35		6.8
BICX-D25.4-f40-BK7		40		6.1
BICX-D25.4-f50-BK7		50		5.2
BICX-D25.4-f60-BK7		60		4.7
BICX-D25.4-f75-BK7		75		4.1
BICX-D25.4-f100-BK7		100		3.6
BICX-D25.4-f125-BK7		125		3.3
BICX-D25.4-f150-BK7		150		3.1
BICX-D25.4-f175-BK7		175		2.9
BICX-D25.4-f200-BK7		200		2.8
BICX-D25.4-f250-BK7		250		2.6
BICX-D25.4-f300-BK7		300		2.5
BICX-D25.4-f400-BK7		400		2.4
BICX-D25.4-f500-BK7		500		2.3
BICX-D25.4-f750-BK7		750		2.2
BICX-D25.4-f1000-BK7	1000	2.2		
BICX-D25.4-f25.4-UV	25.4	25.4	UV FS	10.28
BICX-D25.4-f30-UV		30		8.6
BICX-D25.4-f35-UV		35		7.4
BICX-D25.4-f40-UV		40		6.7
BICX-D25.4-f50-UV		50		5.7
BICX-D25.4-f75-UV		75		4.4
BICX-D25.4-f100-UV		100		3.8
BICX-D25.4-f125-UV		125		3.4
BICX-D25.4-f150-UV		150		3.2
BICX-D25.4-f200-UV		200		2.9
BICX-D25.4-f250-UV		250		2.7
BICX-D25.4-f300-UV		300		2.6
BICX-D25.4-f500-UV		500		2.4
BICX-D25.4-f750-UV		750		2.2
BICX-D25.4-f1000-UV		1000		2.2

## Bi-Convex Glass lens

Part Number	Diameter Ø (mm)	Focal Length (mm)	Material	CT (mm)
BICX-D50.8-f60-BK7	50.8	60	N-BK7	14.4
BICX-D50.8-f75-BK7		75		11.8
BICX-D50.8-f100-BK7		100		9.5
BICX-D50.8-f125-BK7		125		8.1
BICX-D50.8-f150-BK7		150		7.2
BICX-D50.8-f175-BK7		175		6.6
BICX-D50.8-f200-BK7		200		6.2
BICX-D50.8-f250-BK7		250		5.5
BICX-D50.8-f300-BK7		300		5.1
BICX-D50.8-f400-BK7		400		4.6
BICX-D50.8-f500-BK7		500		4.3
BICX-D50.8-f750-BK7		750		3.8
BICX-D50.8-f1000-BK7		1000		3.6
BICX-D50.8-f60-UV		50.8		60
BICX-D50.8-f75-UV	75		12.5	
BICX-D50.8-f100-UV	100		10.3	
BICX-D50.8-f150-UV	150		7.8	
BICX-D50.8-f200-UV	200		6.5	
BICX-D50.8-f250UV	250		5.8	
BICX-D50.8-f300UV	300		5.4	
BICX-D50.8-f500UV	500		4.4	
BICX-D50.8-f1000UV	1000		3.7	

### COATING CODE: AR COATING, R AVG<0.5% AT WAVELENGTH RANGE

None=no coating

VIR = AR Coating at 400~700nm.

NIR= AR Coating at 650~1050nm.

SWIR = AR Coating at 1000~1650nm.

UV = AR Coating at 250~400nm (apply to UV FS material lens only).

### MATERIAL REFRACTION INDEX:

N-SF11, Index of refraction is 1.785 at 587.6 nm

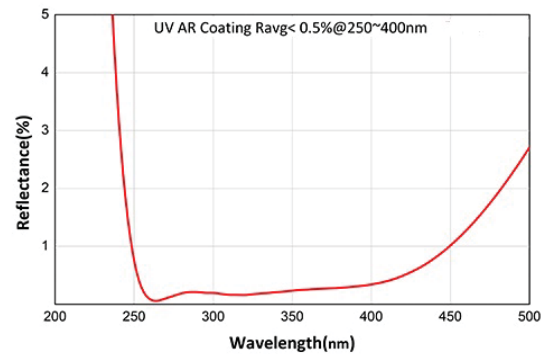
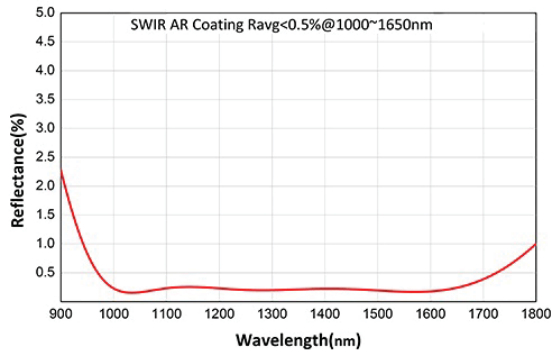
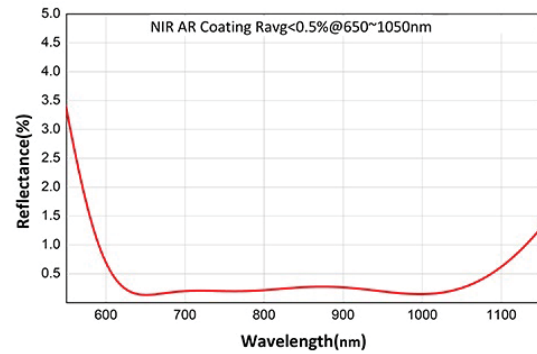
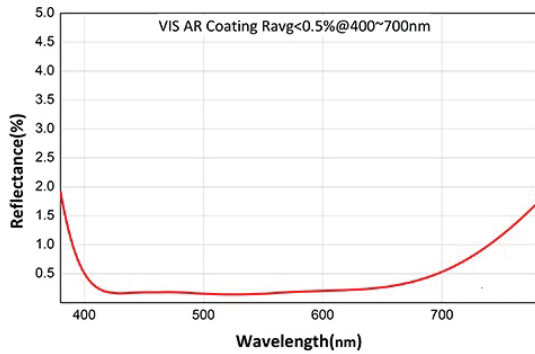
N-SF5, Index of refraction is 1.673 at 587.6 nm

N-BK7, Index of refraction is 1.517 at 587.6 nm.

UV FS, Index of refraction is 1.458 at 587.6 nm

## Bi-Convex Glass lens

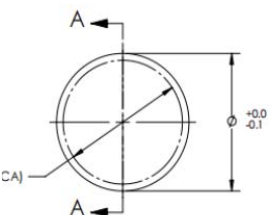
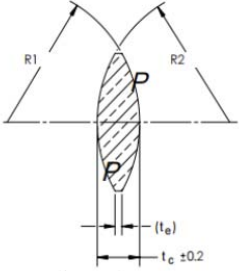
### BI-CONVEX GLASS LENS COATING



### BI-CONVEX GLASS LENS DRAWING

NOTES:

1. ALL DIMENSIONS IN MILLIMETERS
2. SURFACES MARKED "P" POLISH; ALL OTHERS FIND GROUND.
3. FOCAL LENGTH TOLERANCE:  $\pm 1\%$
4. SCRATCH/DIG: 20-10
5. CENTRITION: 3 ARC MINUTES
6. SURFACE IRREGULARITY:  $\lambda/10$  @633nm
7. EDGE BEVEL:
  - a. 0.10~0.25 FACE WIDTH AT 45° FOR Dia.  $\leq 25.0$ mm
  - b. 0.25~0.50 FACE WIDTH AT 45° FOR Dia.  $\geq 25.0$ mm
8. MIN. CLEAR APERAURE IS CENTRAL 90% OF DIAMETER
9. MATERIAL OPTION: N-BK7, UV Fused silica, N-SF11, NSF5
10. COATING OPTION:
  - a. UNCOATED
  - b. VIR AR COATING,  $R_{avg} \leq 0.5\%$  @400~700nm
  - c. NIR AR COATING,  $R_{avg} \leq 0.5\%$  @650~1050nm
  - d. SWIR AR COATING,  $R_{avg} \leq 0.5\%$  @1000~1650nm
  - e. UV AR COATING,  $R_{avg} \leq 0.5\%$  @250~400nm

Third Angle Projection			
		TITLE: <b>Bi-Convex Lens</b>	
SIZE: <b>A4</b>		Lens Code: <b>BICX-</b>	
ALL DIMS IN mm		SCALE	SHEET 01 OF 01