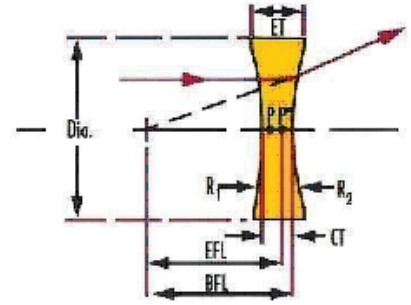


# Bi-Concave Glass lens



Material Option: N-BK7,UV Fused silica,N-SF11  
 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
BICC	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)		
BICC-D6.0-f6.0-SF11	6	-6	N-SF11	2.15		
BICC-D6.0-f10-BK7		-8	N-BK7	3		
BICC-D6.3-f10-UV	6.3	-10	UV FS	2.7		
BICC-D12-f12-SF11	12	-12	N-SF11	4.59		
BICC-D12-f12-BK7		-12	N-BK7	4.8		
BICC-D12.5-f12.5-BK7(UV)	12.5	-12.5	N-BK7 UV-FS	4.9		
BICC-D12.5-f15-BK7(UV)		-15		4.4		
BICC-D12.5-f20-BK7(UV)		-20		3.8		
BICC-D12.5-f25-BK7(UV)		-25		3.4		
BICC-D12.5-f30-BK7(UV)		-30		3.2		
BICC-D12.5-f40-BK7(UV)		-40		2.9		
BICC-D12.5-f50-BK7(UV)		-50		2.7		
BICC-D12.5-f75-BK7(UV)		-75		2.5		
BICC-D12.5-f100-BK7(UV)		-100		2.4		
BICC-D12.5-f125-BK7(UV)		-125		2.3		
BICC-D12.5-f175-BK7		12.5		-175	N-BK7	2.2
BICC-D12.5-f250-BK7				-250		2.1

## Bi-Concave Glass lens

Part Number	Diameter Ø (mm)	Focal Length (mm)	Material	CT (mm)
BICC-D25-f100-BK7	25	-100	N-BK7	3.5
BICC-D25-f125-BK7		-125		3.2
BICC-D25-f150-BK7		-150		3
BICC-D25-f175-BK7		-175		2.8
BICC-D25-f200-BK7		-200		2.7
BICC-D25-f250-BK7		-250		2.6
BICC-D25-f300-BK7		-300		2.5
BICC-D25-f25-UV	25	-25	UV-FS	9.4
BICC-D25-f37.5-UV		-37.5		7.2
BICC-D25-f62.5-UV		-62.5		5.5
BICC-D25-f75-UV		-75		5
BICC-D25-f100-UV		-100		5
BICC-D25-f125-UV		-125		5.7
BICC-D25-f175-UV		-175		5.4
BICC-D25-f300-UV	-300	5		
BICC-D30-f30-BK7	30	-30	N-BK7	9.4
BICC-D30-f50-BK7		-50		6.3
BICC-D30-f100-BK7		-100		4.1
BICC-D30-f150-BK7		-150		3.4
BICC-D30-f200-BK7		-200		3.1
BICC-D42-f50-BK7	42	-50	N-BK7	10.5
BICC-D42-f100-BK7		-100		6.1
BICC-D42-f150-BK7		-150		4.7
BICC-D42-f250-BK7		-250		3.6
BICC-D42-f300-BK7		-300		3.4
BICC-D42-f400-BK7		-400		3
BICC-D42-f500-BK7		-500		2.8
BICC-D50-f50-BK7	50	-50	N-BK7	14.3
BICC-D50-f100-BK7		-100		7.9
BICC-D50-f150-BK7		-150		5.9
BICC-D50-f250-BK7		-250		4.3
BICC-D50-f300-BK7		-300		3.9
BICC-D50-f50-UV	50	-50	UV FS	18.5
BICC-D50-f75-UV		-75		13.7
BICC-D50-f100-UV		-100		11.4
BICC-D50-f125-UV		-125		10.1
BICC-D50-f150-UV		-150		9.3

## Bi-Concave Glass lens

### 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).

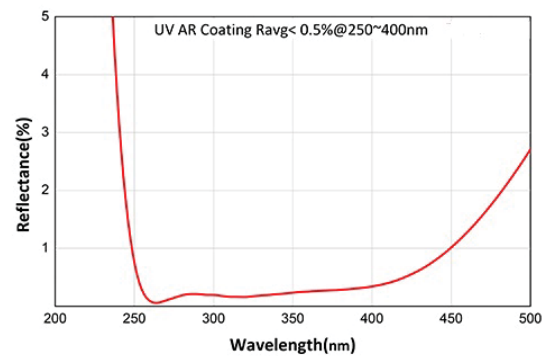
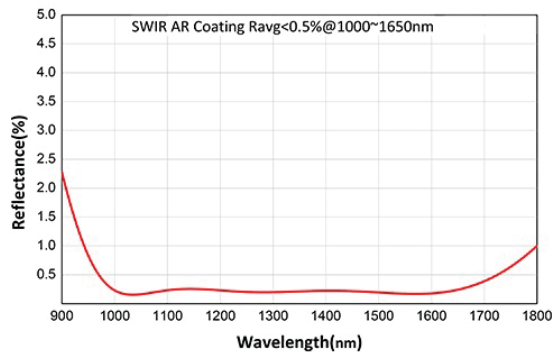
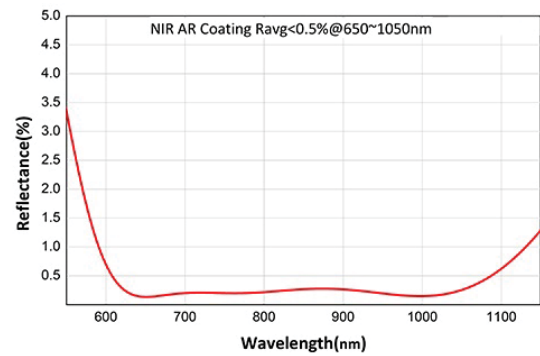
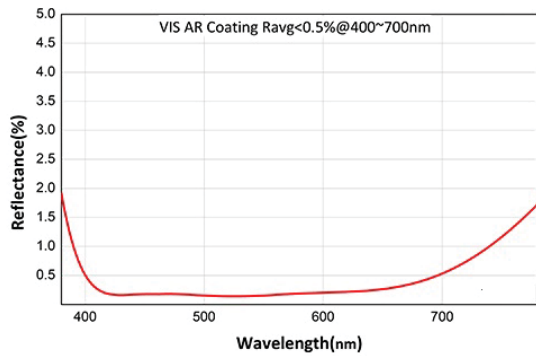
### MATERIAL REFRACTION INDEX:

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

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

UV FS, Index of refraction is 1.458 at 587.6 nm

### BI-CONCAVE GLASS LENS COATING

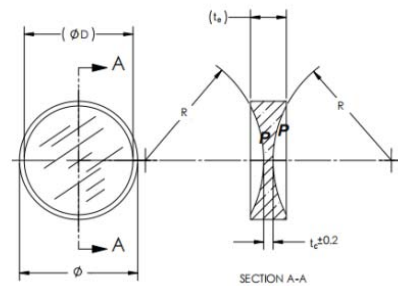




## Bi-Concave Glass lens

### BI-CONCAVE 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: 1 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
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-Concave Lens</b>	
SIZE	A4	Lens code: <b>BICC-</b>	REV
ALL DIMS IN	mm	SCALE	SHEET 01 OF 01