

We offer THz windows made of polymer and crystal materials.

1. Crystals

1.1 HRFZ-Si windows

Common specification:

Material	HRFZ-Si
Type	plano-plano
Available sizes, mm	to 150
Diameter or cross-cut tolerance, mm	+0.0 / -0.1
Thickness tolerance, mm	+/-0.1
Clear aperture, %	>=90
Parallelism, arc. min	3
Surface quality (two-sided polishing), scr/big	60/40
Surface accuracy, mm	+/-0.01 deviation from ideal plane
Coatings	AR coatings upon request

The following windows are available from stock:

No.	Diameter, mm (inches)	Thickness, mm
1	25.4 (1.0)	1.0
2	38.1 (1.5)	1.0
3	50.8 (2.0)	1.0
4	76.2 (3.0)	1.0
5	101.6 (4.0)	1.0

Custom sizes are manufactured upon request.

1.2 THz grade crystal quartz and THz grade sapphire windows

Common specification:

Material	THz grade crystal quartz (z-cut) and THz grade sapphire
Type	plano-plano
Dimensions tolerance, mm	+/-0.1
Clear aperture, %	>=90
Parallelism, arc. min	5
Surface quality (two-sided polishing), scr/dig	80/50
Surface accuracy, mm	+/-0.01 deviation from ideal plane
Coating (for crystal quartz)	AR coatings upon request

The following THz grade crystal quartz windows are available from stock:

No.	Diameter, mm (inches)	Thickness, mm
1	25.4 (1.0)	1.0, 2.0, and 3.0
2	38.1 (1.5)	1.0, 2.0, and 3.0
3	50.8 (2.0)	1.0, 2.0, and 3.0

Alternate sizes and custom designs are manufactured upon request.

The following sizes of THz grade crystal quartz are available: for crystals grown along Z-axis: X >=100 mm, Y >=150 mm and Z up to 35 mm and along X-axis: X up to 30 mm, Y >=100 mm and Z >=125 mm.

THz grade sapphire windows are available upon request. The finished parts of different dimensions are available from stock and supplied within a week.



2. Polymers

2.1 TPX windows

Material	TPX
Type	plano-plano, wedged (wedge is 6 mrad)
Available diameters, mm	to 300
Dimensions tolerance, 1mm	+ /-0.25
Clear aperture, %	>=90
Surface quality, scr/dig	80/50 (two-sided polishing)
Surface roughness	Rz 0.025 (TPX)
Surface accuracy, mm	±0.01 deviation from ideal plane

The following TPX windows are available from stock:

No.	Diameter, mm (inches)	Thickness, mm
1	25.4 (1.0)	2.0
2	38.1 (1.5)	3.0
3	50.8 (2.0)	3.5

Custom sizes (max thickness 30 mm) are manufactured upon request.

2.2 ZEONEX windows

Material	ZEONEX
Type	plano-plano, wedged
Available diameters, mm	to 120
Dimensions tolerance, 1mm	+ /-0.25
Clear aperture, %	>=90
Surface quality, scr/dig	80/50 (two-sided polishing)
Surface roughness	Rz 0.05
Surface accuracy, mm	±0.01 deviation from ideal plane

ZEONEX windows are manufactured upon request.

Maximum thickness of the material in stock is 33 mm.

The finished parts of different dimensions are available from stock and supplied within a week.

Please check the Optics stock at our web site. For price quotation and delivery please e-mail us.