

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		Thickness mm
	mm	inches	
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		Thickness mm
	mm	inches	
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;
- for crystals grown 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. Please check the Optics stock on our website. For price quotation and delivery please fill in our Request form.

2. Polymers

2.1 TPX windows

Material	TPX
Type	plano-plano, wedged (wedge is 6 mrad)
Available diameters, mm	to 100
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		Thickness mm
	mm	inches	
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. 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 fax or e-mail us.