

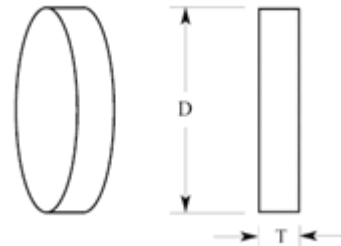
# SAPPHIRE(AI2O3) WINDOWS

Sapphire is an ideal window material. It has excellent transmittance from the ultraviolet to the mid-infrared, it exhibits high thermal conductivity, and it has very high surface hardness, making it more resistant to scratches than BK7 or fused silica.

Non-coated and AR coated products are available.

## ■ Standard Specifications:

<b>Optical Material:</b>	Sapphire Uniaxial Crystal(AI2O3)
<b>Orientation:</b>	Random
<b>Diameter Tolerance:</b>	+0.0, -0.1mm
<b>Thickness Tolerance:</b>	± 0.2mm
<b>Clear Aperture:</b>	>85%
<b>Parallelism:</b>	see the table
<b>Surface Quality:</b>	80-50 scratch and dig
<b>Wavefront Distortion:</b>	see the table
<b>Bevel:</b>	<0.25mm X 45°
<b>Coating:</b>	available upon request



## ■ Standard Sapphire Windows

Dia(mm)	T(mm)	Wavefront Distortion	Product Number
<b>Parallelism 1 arc min</b>			
10.0	0.5	Lambda/2	UQT-WDFH1001
12.7	0.9	Lambda/2	UQT-WDFH1002
25.0	1.0	Lambda/2	UQT-WDFH1003
25.4	2.0	Lambda/2	UQT-WDFH1004
30.0	1.2	Lambda	UQT-WDFH1005
50.0	3.0	Lambda	UQT-WDFH1006
<b>Parallelism 3 arc min</b>			
10.0	0.5	Lambda	UQT-WDFL1101
12.7	0.9	Lambda	UQT-WDFL1102
15.0	1.0	Lambda	UQT-WDFL1103
15.0	1.5	Lambda	UQT-WDFL1104
25.0	2.0	Lambda	UQT-WDFL1105
25.4	3.0	Lambda	UQT-WDFL1106
30.0	1.2	2 Lambda	UQT-WDFL1107
50.0	2.0	2 Lambda	UQT-WDFL1108
50.8	2.5	2 Lambda	UQT-WDFL1109

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

NOTES!

- ➔ Sapphire transmits ultraviolet light, but sometimes exhibit fluorescence when subjected to powerful ultraviolet sources. For this reason, they are best suited for use with visible to infrared wavelengths.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.