

Polarizer Sizes and Mounting Options

Sizes and Mounting Datasheet



Moxtek D-Mount



Moxtek S-Mount



Various Cut Polarizer Shapes and Sizes

Moxtek can provide protective mounting for our polarizer plates that reduce the risk of damaging the wire-grid polarizer structure. These mounts come in standard sizes shown in the table below.

Standard Mount Size Table

D-Mounts (Circular)		S-Mounts (Square)	
Size (mm)	Clear Aperture (mm)	Size (mm)	Clear Aperture (mm)
Ø12.5	Ø8.5	12.5 x 12.5	7.0 x 7.0
Ø25.0	Ø19.0	25.0 x 25.0	19.0 x 19.0
Ø50.0	Ø42.0	50.0 x 50.0	44.0 x 44.0

All mounts are 5.8mm in thickness

Features	Benefits
Mount Material	6061 anodized aluminum
Frame	Good coefficient of thermal expansion
	Protection - don't handle or touch polarizer directly
	Cover glass mounted in frame to protect wire-grid (optional)
Identification on Frame	Transmission axis (Reference mark) (See reverse side for wire-grid direction explanation)
	Product Name
Options	S-Mounts (Square) or D-Mounts (Circular)
	3 Standard Sizes (see table above), custom sizes on request
	Single polarizers with or without cover glass
	Double polarizer (with wire-grids facing inward for protection)

Mounting Options

Moxtek also offers to mount our polarizers in custom mounts which the customer provides or which Moxtek sources using the customer supplied drawing. Moxtek ensures that the polarizer meets the performance and visual specifications after the mounting.

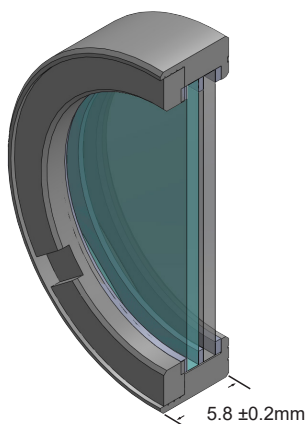
Please contact us for information about customized mounts.

Custom Sizes

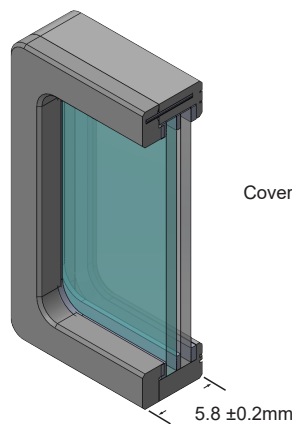
Moxtek offers custom sizing and shapes of polarizers for customers. For dimensional limits for specific shapes and glass substrates, please see next page.

Do not touch or clean the wire-grid polarizer surface otherwise the polarizer will be damaged.

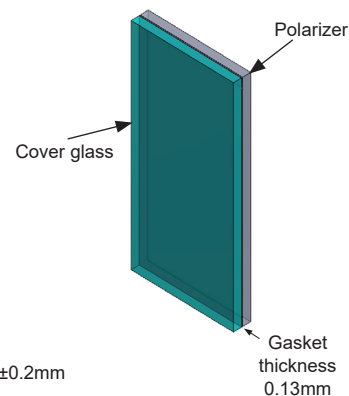
Standard D-Mount



Standard S-Mount



Cover Glass w/ PSA Gasket (unmounted)



Polarizers can be assembled with a cover glass as shown above. Unmounted polarizers can have a cover glass attached using a Pressure Sensitive Adhesive (PSA) gasket. Adding cover glass will protect the wire-grid polarizer surface but will slightly lower the overall transmission performance. All cover glass is AR coated to reduce reflections.



Minimum Cut Sizes & Clear Aperture

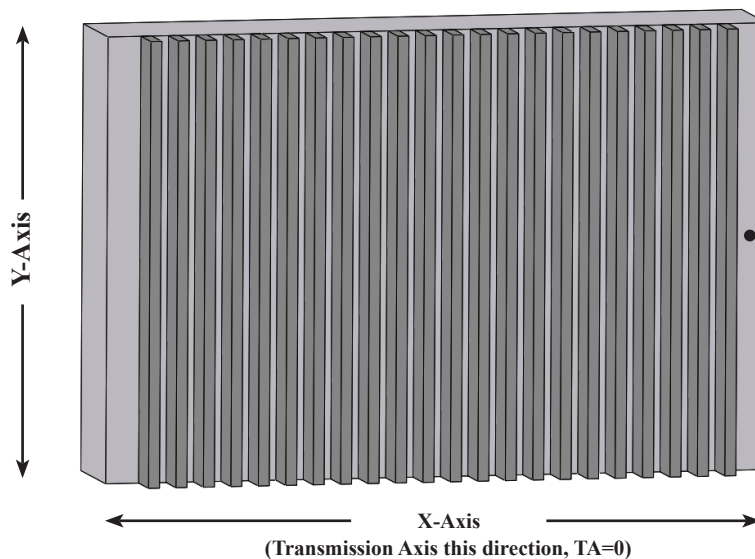
Minimum Dimension Limits												
Substrate	Min Dia (mm)	Dim Tolerance (mm)	Clear Aperture (mm)	Min Dim (mm)	Dim Tolerance (mm)	Clear Aperture (mm)	Min Dia (mm)	Dim Tolerance (mm)	Clear Aperture (mm)	Min Dim (mm)	Dim Tolerance (mm)	Clear Aperture (mm)
	○ Rounds			■ Square			○ Rounds with Cover Glass			■ Square with Cover Glass		
0.7mm Eagle XG	Ø10	±0.15	Ø7	4 x 4	±0.2	2 x 2	Ø10	±0.4	Ø6	6 x 6	±0.2	2 x 2
0.7mm Fused Silica	Ø10	±0.15	Ø7	4 x 4	±0.2	2 x 2	Ø10	±0.4	Ø6	6 x 6	±0.2	2 x 2
0.7mm Silicon	N/A	N/A	N/A	10 x 10	±0.4	6 x 6	N/A	N/A	N/A	N/A	N/A	N/A
1.0mm Fused Silica	Ø12.5	±0.2	Ø9.5	10 x 10	±0.4	7 x 7	Ø12.5	±0.4	Ø8.5	10 x 10	±0.4	6 x 6
1.6mm Borofloat	Ø24	±0.4	Ø21	12 x 12	±0.4	9 x 9	Ø24	±0.5	Ø20	12 x 12	±0.5	8 x 8
1.6mm Fused Silica	Ø24	±0.4	Ø21	12 x 12	±0.4	9 x 9	Ø24	±0.5	Ø20	12 x 12	±0.5	8 x 8

Maximum Cut Sizes & Clear Aperture

Maximum Dimension Limits									
Substrate	Max Dia (mm)	Dim Tolerance (mm)	Clear Aperture (mm)	Max Dim (mm)	Dim Tolerance (mm)	Clear Aperture (mm)	Max Dia (mm)	Dim Tolerance (mm)	Clear Aperture (mm)
	○ Rounds			■ Square			● Octagon		
0.7mm Eagle XG	Ø180	±0.15	Ø177	126 x 126	±0.2	124 x 124	166	±0.1	164
0.7mm Fused Silica	Ø180	±0.15	Ø177	126 x 126	±0.2	124 x 124	166	±0.1	164
0.7mm Silicon	N/A	N/A	N/A	126 x 126	±0.4	122 x 122	166	±0.5	162
1.0mm Fused Silica	Ø180	±0.2	Ø177	126 x 126	±0.4	123 x 123	166	±0.2	163
1.6mm Borofloat	Ø180	±0.4	Ø177	126 x 126	±0.4	123 x 123	166	±0.4	163
1.6mm Fused Silica	Ø180	±0.4	Ø177	126 x 126	±0.4	123 x 123	166	±0.4	163

Note for Silicon products: Rounds are not available and other shape dimensions vary slightly.

Please contact us for information about customized shapes that are not listed in the tables.



The Transmission Axis (TA) is referenced from the X-axis TA=0. TA is perpendicular to wire-grid. Reference marks on mounts indicate transmission direction.



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Performance data was taken from sample evaluations. Some part-to-part variation is expected.
For warranty and ordering information, please visit moxtek.com.

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