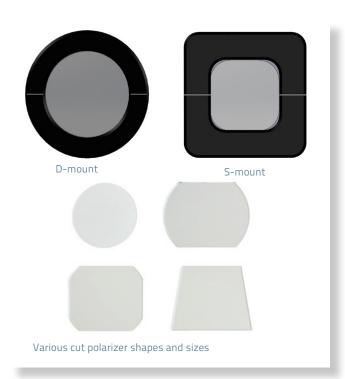
Polarizer Sizes and Mounting Options



Mointing 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 tables on next page. Do not touch or clean the wire-grid polarizer surface otherwise the polarizer will be damaged.

Standard mounts

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

| Standard mount size [mm] | | | | | | | | |
|------------------------------------|----------------|-------------------|----------------|--|--|--|--|--|
| D-mour | nts (circular) | S-mounts (square) | | | | | | |
| Size | Clear aperture | Size | Clear aperture | | | | | |
| Ø 12.5 | Ø 8.5 | 12.5 x 12.5 | 7.0 × 7.0 | | | | | |
| Ø 25.0 | Ø 19.0 | 25.0 x 25.0 | 19.0 x 19.0 | | | | | |
| Ø 50.0 | Ø 42.0 | 50.0 x 50.0 | 44.0 × 44.0 | | | | | |
| All mounts are 5.8 mm in thickness | | | | | | | | |

| Features | Benefits | | | | |
|----------------|--|--|--|--|--|
| Mount material | 6061 anodized aluminum | | | | |
| | Good coefficient of thermal expansion | | | | |
| Frame | Protection - don't handle or touch polarizer directly | | | | |
| | Cover glass mounted in frame to protect wire grid (optional) | | | | |
| Identification | Transmission axis (reference mark) (See reverse side for wire grid direction explanation.) | | | | |
| | Product name | | | | |
| | S-mounts (square) or D-mounts (circular) | | | | |
| Ontions | 3 standard sizes (see table above), custom sizes on request | | | | |
| Options | Single polarizers with or without cover glass | | | | |
| | Double polarizer (with wire-grids facing inward for protection) | | | | |



Quantum Design GmbH

Breitwieserweg 9

D-64319 Pfungstadt

Polarizers can be assembled with a cover glass as shown. 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.





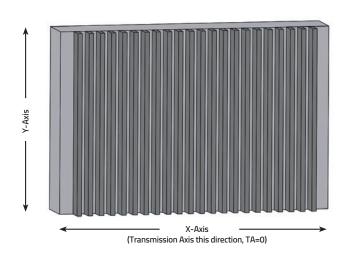


Polarizer Sizes and Mounting Options

| Minimum cut sizes & clear aperture [mm] | | | | | | | | | | | | |
|---|---------------------|------------------------|-------------------|----------------------|------------------------|-------------------|-------------------------|------------------------|-------------------|-------------------------|------------------------|-------------------|
| Substrate | Minimum diameter | Dimension tolerance | Clear aperture | Minimum dimension | Dimension tolerance | Clear aperture | Minimum diameter | Dimension tolerance | Clear aperture | Minimum dimension | Dimension tolerance | Clear aperture |
| | Rounds O | |) | Square 🗌 | | | Rounds with cover glass | | | Square with cover glass | | |
| 0.7 mm Eagle XG | Ø 10 | ±0.15 | Ø7 | 4 × 4 | ±0.2 | 2 x 2 | Ø 10 | ±0.4 | Ø6 | 6 x 6 | ±0.2 | 2 x 2 |
| 0.7 mm Fused Silica | Ø 10 | ±0.15 | Ø7 | 4 × 4 | ±0.2 | 2 x 2 | Ø 10 | ±0.4 | Ø6 | 6 x 6 | ±0.2 | 2 x 2 |
| 0.7 mm 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 |
| 1.0 mm Fused Silica | Ø 12.5 | ±0.2 | Ø 9.5 | 10 x 10 | ±0.4 | 7 x 7 | Ø 12.5 | ±0.4 | Ø 8.5 | 10 x 10 | ±0.4 | 6 x 6 |
| 1.6 mm Borofloat | Ø 24 | ±0.4 | Ø 21 | 12 x 12 | ±0.4 | 9 x 9 | Ø 24 | ±0.5 | Ø 20 | 12 x 12 | ±0.5 | 8 x 8 |
| 1.6 mm Fused Silica | Ø 24 | ±0.4 | Ø 21 | 12 x 12 | ±0.4 | 9 x 9 | Ø 24 | ±0.5 | Ø 20 | 12 x 12 | ±0.5 | 8 x 8 |

| Maximum cut sizes & clear aperture [mm] | | | | | | | | | | |
|---|---------------------|------------------------|-------------------|----------------------|---|----------|----------------------|------------------------|-------------------|--|
| Substrate | Maximum diameter | Dimension tolerance | Clear aperture | Maximun dimension | Dimension tolerance Clear aperture | | Maximun dimension | Dimension tolerance | Clear aperture | |
| | Rounds O | | | Square 🗌 | | | Octagon | | | |
| 0.7 mm Eagle XG | Ø 180 | ±0.15 | Ø 177 | 126 x 126 | ±0.2 | 124 x124 | 166 | ±0.1 | 164 | |
| 0.7 mm Fused Silica | Ø 180 | ±0.15 | Ø 177 | 126 x 126 | ±0.2 | 124 x124 | 166 | ±0.1 | 164 | |
| 0.7 mm Silicon | N/A | N/A | N/A | 126 x 126 | ±0.4 | 122 x122 | 166 | ±0.5 | 162 | |
| 1.0 mm Fused Silica | Ø 180 | ±0.2 | Ø 177 | 126 x 126 | ±0.4 | 123 x123 | 166 | ±0.2 | 163 | |
| 1.6 mm Borofloat | Ø 180 | ±0.4 | Ø 177 | 126 x 126 | ±0.4 | 123 x123 | 166 | ±0.4 | 163 | |
| 1.6 mm Fused Silica | Ø 180 | ±0.4 | Ø 177 | 126 x 126 | ±0.4 | 123 x123 | 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 perpindicular to wire-grid.

Reference marks on mounts indicate transmission direction.



