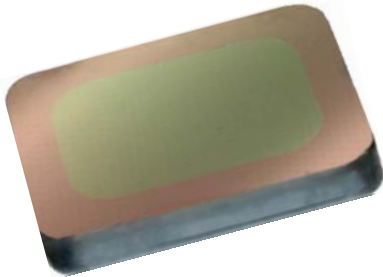


# X-RAY Windows



## Sealed Proportional Counter X-ray Windows

MOXTEK sealed proportional counter windows allow high transmission of low-energy x-rays (including Boron). These windows are ideal for sealed proportional counter applications that require analysis of light elements.

### Features

Sealed  
Ultra-thin film  
Mechanically strong  
Charge dissipation  
Light rejection

### Benefits

No gas flow  
High transmission of low energy  
Withstand partial pressures and cycling  
Reduces unwanted noise on detector sensor  
Reduces unwanted peaks on detector sensor

### Applications

#### Benchtop WDXRF

- Environmental
- RoHS/WEEE

#### Floor standing WDXRF

#### Portable WDXRF

### Window Composition

MOXTEK proportional counter windows are composed of an ultra-thin layer of MOXTEK polymer, a resistive Duracoat, a charge dissipative aluminum coating, and a strong support structure composed of silicon.

### Mechanical Strength

MOXTEK proportional counter windows are supported by a rigid silicon grid. This patented window design enables the window to withstand over 1.2 atmosphere of differential pressure. This window can withstand over 100,000 cycles at that same differential pressure without degradation in window performance. Pressure Limits: 1.2 atm frontal pressure, 0.3 atm backside pressure.

### Temperature Performance

MOXTEK proportional counter windows are capable of exposure to 85 C at a differential pressure of 1 atm. (*Windows tested using frames made of Stainless 416*).

### Charge Dissipation and Light Rejection

MOXTEK proportional counter windows are coated with aluminum for charge dissipation and light rejection. A custom thickness can be requested.



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**MOXTEK®** [www.moxtek.com](http://www.moxtek.com)

## Active Area

MOXTEK sealed proportional counter windows have a maximum open area of 600 mm<sup>2</sup>.

The grid open area is generally 76%. Two options are currently available suited to the simultaneous and sequential applications:

- Simultaneous: Active area = 5 mm x 25 mm
- Sequential: Active area = 20 mm x 30 mm

Contact MOXTEK about custom dimensions and mounts.

## Vacuum Tightness

Every window is tested and guaranteed to have a leak rate of less than  $5 \times 10^{-10}$  mbar L/sec He.

## Chemical Resistance

MOXTEK proportional counter windows are resistant to many solvents, acids, and bases

## Cleaning

MOXTEK proportional counter windows can be cleaned with DI water, and solvents.

Contact MOXTEK for details.

## Mounting

MOXTEK proportional counters are usually attached to stainless steel mounts. Care should be taken to not flex the mount or damage to the window may occur. Material with a thermal coefficient of expansion equivalent to or less than Stainless 416 is required.

## Warranty

MOXTEK proportional counter windows are warranted against failure for a period of 12 months from shipment date. Damage incurred due to improper handling and usage is not warranted.

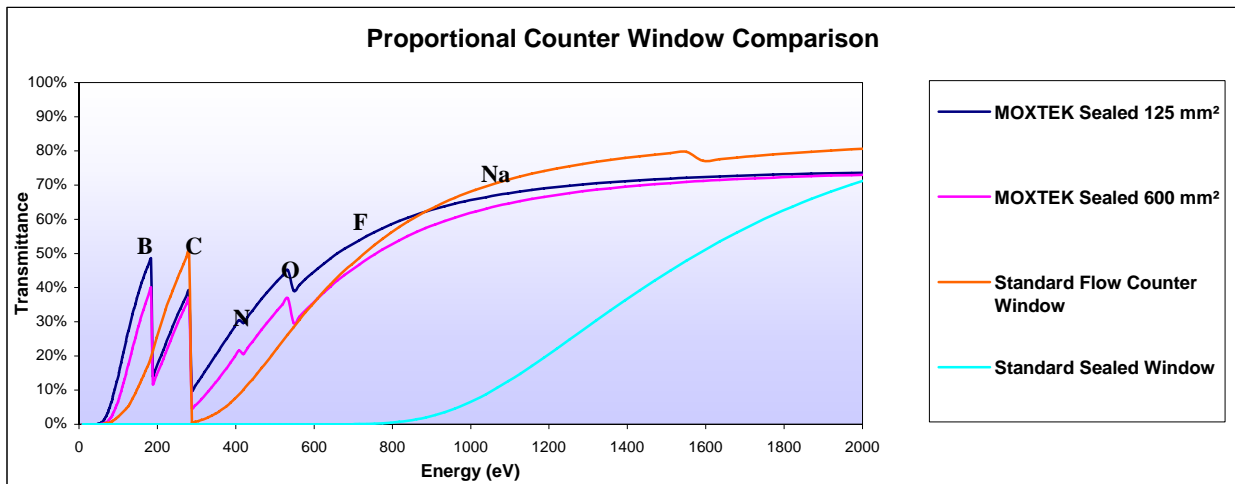


Figure above: Transmission Performance

Window	Active Area (mm <sup>2</sup> )		Outside Dimensions (mm)		Window Grid Thickness	Grid Open Area	Integrated Si Collimator Available
	Length	Width	Length	Width			
600 mm <sup>2</sup>	30.6 mm	20.6 mm	49.5 mm	42.0 mm	3.7 mm	76%	Yes
125 mm <sup>2</sup>	25.5 mm	5.6 mm	33.4 mm	29 mm	0.3 mm	76%	Yes

## Ordering Information

Please Contact MOXTEK for a quote. Typical lead time on standard parts is 3-4 weeks.



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