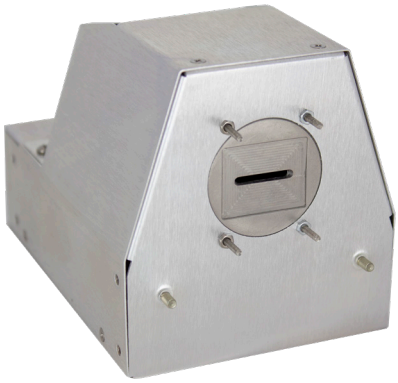
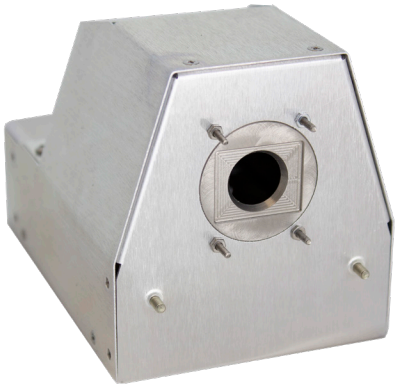
X-ray Sources

Mox140G™

Datasheet



Mox140G Fan Beam
(TUB00205)



Mox140G Cone Beam
(TUB00202)

Moxtek manufactures low-power miniature X-ray sources for a variety of applications including handheld XRF, Security and NDT and benchtop instruments. Moxtek sources are small, lightweight and can be packaged into customer enclosures. Mox140G is ideally configured for backscatter imaging. Mox140G is capable of running at 140kV (max).

Specifications

Tube type:	Metal-ceramic
Operating Temperature°:	-10° to +50° C
Storage Temperature°:	-30° to +65° C
Cooling:	Forced air (as needed)
Weight:	1.6kg
Available Targets:	Tungsten
HV Polarity:	Bi Polar
Anode:	Transmission Window
High Voltage Potential:	140kV (max)
Maximum Exposure:	30 sec
Maximum Power:	7 W (50% duty cycle)
Maximum Average Power:	3.5 W
Radiation Leakage:	< 1.0mR/hr @ 5cm

Source Characteristics

Focal Spot Size:	1.0mm x 1.2mm FWHM
Focal Spot to Object:	14.1mm
Window:	0.001in Tungsten
Input Power:	15 W
Signal Input Voltage:	3.3V +/- 0.1 and 5.0V +/- 0.1
Control:	Digital I2C
Internal Collimator:	Maximum solid cone or fan angle 60˚
RoHS Compliant:	RoHS 3
Standard Warranty:	1 year or 2000 operating hours

Applications

X-ray Imaging

- Security
- Backscatter Imaging
- Non-destructive testing

X-Ray Fluorescence

- Benchtop XRF

Notes

- Caution: Initial cold warm up requires a 3 second ramp to full output.
- Operating Temperature: Moxtek recommends a warm up period of 10 minutes before running below 0°C.

⚠ WARNING

X-rays are emitted from the sides and ends of this product when energized. Moxtek takes actions to reduce the exposure rate from X-rays emitted from the sides through the use of various shielding agents inherent to this product design. It is the buyer's responsibility to ensure adequate protection is provided in the testing and manufacturing of the final product and that users are adequately shielded from incidental exposure.

MOXTEK®