



TUB00082



TUB00083

The Moxtek® 50kV X-ray Source is a small, low power device used for a variety of applications including handheld, portable, and bench top instrumentation.

Features	Benefits
Small, compact design	Close coupling of detector/ source
Lightweight	Portable, easy to integrate
Stable output	High precision of measurements, low detection limits
Low power consumption	Long battery life
Low spectral contamination	Clean spectrum, high precision of analysis
High x-ray output	Short sampling time

Applications

Materials Characterization and Identification (XRF)

- Metal and alloy sorting
- Mining and geology
- Environmental analysis
- Lead in paint
- Regulatory (RoHS/WEEE)
- Art and archeometry
- R&D

X-ray Imaging

- Medical R&D, small animal imaging
- Security
- Radiographic inspection

Mechanical Specifications

Tube type: Metal-ceramic

Cathode Type: Tungsten Filament

Operating Temperature°: -10° to +50° C

Storage Temperature°: -25° to +85° C

Cooling: Conduction

Weight: ~350g

Available Targets: Ag, W, Rh

HV Polarity: Grounded anode

Source Characteristics

High Voltage Potential: 4 to 50kV

Beam Current: 5 to 200µA

Maximum Power: 4 watts

Focal Spot Size: 500 to 800µm FWHM (typical)

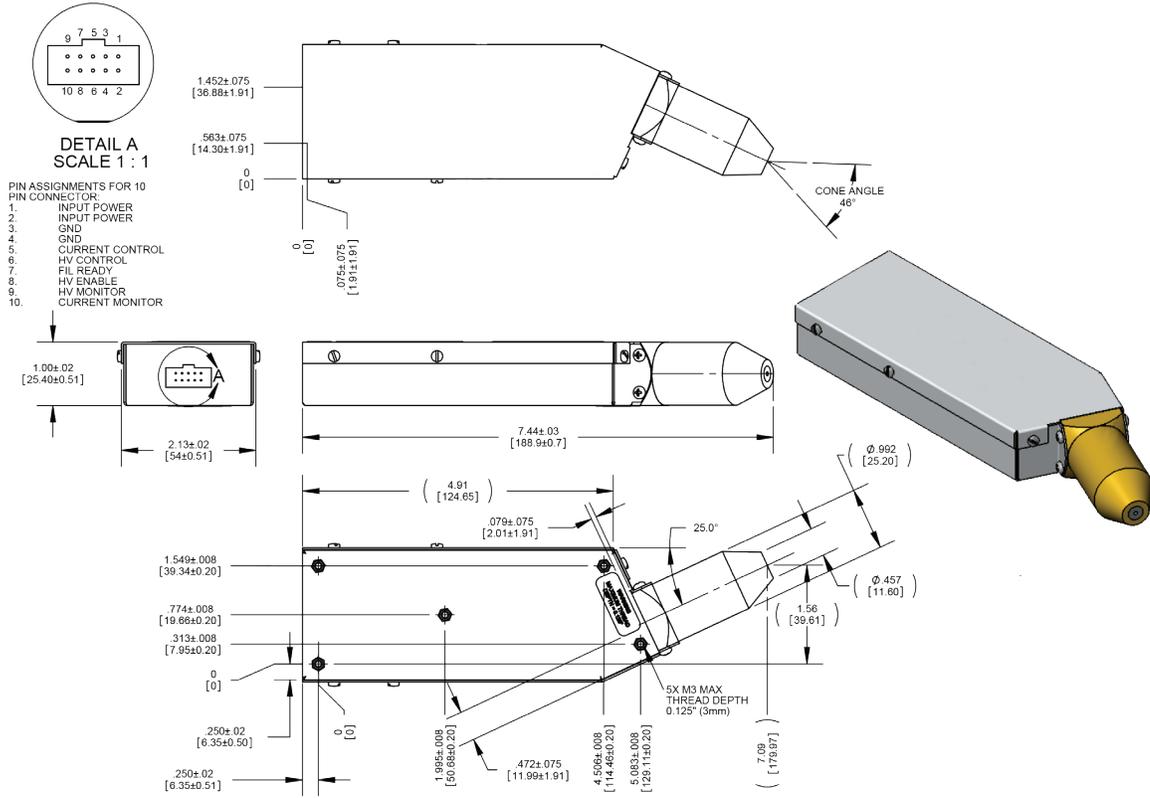
Window: Beryllium, 0.25mm thick or 0.125

Input Power: 6-12 VDC

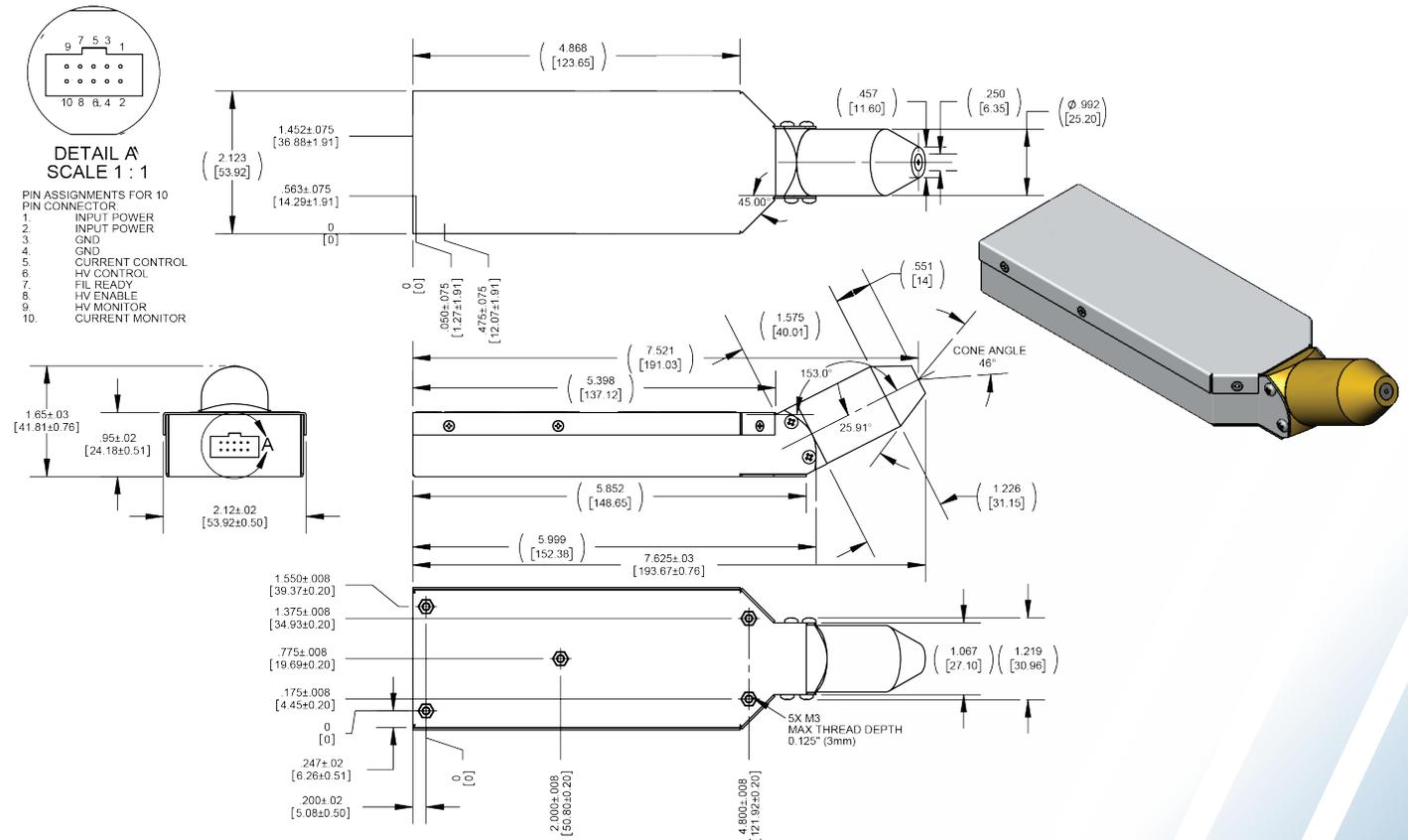
Focus-to-Object Distance: 2.2mm

Standard Warranty: 1 year or 2000 operating hours

TUB00082 Mechanical Drawing



TUB00083 Mechanical Drawing



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.

This product contains a beryllium window. The inhalation of fumes or dust from beryllium metal (or its compounds) are hazardous. Corrosion may occur on the beryllium window during use, these should not be scraped off, machined, or removed. Disposal of the tube unit should conform to federal, state, and local regulations governing beryllium.



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