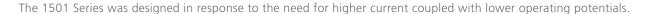
# **Glass X-ray Tube** 1501 Series

The 1501 Series X-ray tube is a 50kV, 50-75W X-ray tube designed for applications where high current, high flux density and continuous operation are important.

Utilizing our highly stable and high intensity X-ray tube technology, the 1501 Series X-ray tube is ideal for medical imaging, XRF applications and most industrial inspection and non-destructive testing applications that require high resolution, including PCB assembly, battery, plastic, metal and mechanical parts inspection.

The 1501 Series X-ray tube can also be supplied in a stainless steel, lead-lined package that is filled with dielectric oil that enables the unit to provide maximum X-ray shielding and heat dissipation.



The 1501 Series X-ray tube is available in a wide range of spot sizes, targets and price points to meet your needs.

#### **Benefits**

- Wide operating range enables optimal image contrast
- Stable X-ray output delivers high precision measurements
- Low attenuation beryllium window ensures high transmission of low energy X-rays

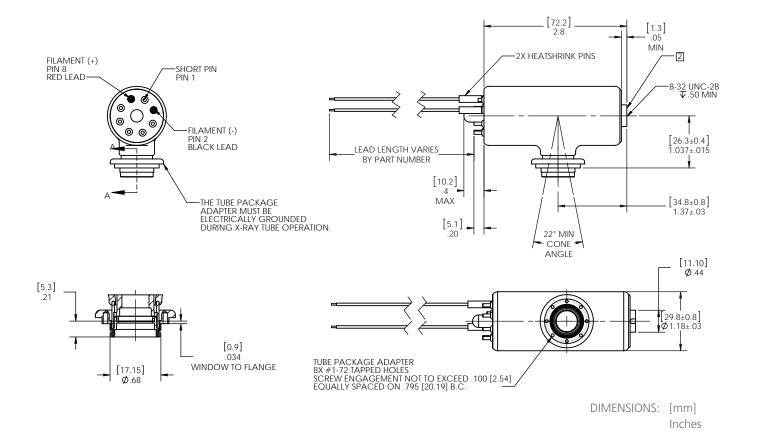
### **Applications**

- Medical imaging
- Inspection of printed circuit boards and electronic devices
- Nondestructive testing of plastic, metal and mechanical parts
- Thickness gauging
- Analytical XRF

Specifications					
Operating Voltage Range:	4-50kV				
Maximum Power:	50-75W				
Maximum Beam Current:	2.5mA				
Maximum Filament Current:	2.4A				
Filament Voltage:	3.75V (Nominal)				
Target Material:	Rh, Cr				
Spot Size:	125µm (nominal per IEC60336,NEMA XR5-1999)				
Cone of Illumination:	22° Minimum				
Spot to Window Spacing (FOD):	30.8 mm ± 1mm (1.2")				
Window Material and Thickness:	Be @ 127µm				
Flux & Current Stability:	≤ 0.2% over 4-hour period				
Duty Cycle:	Continuous				
Ambient Temperature Conditions:	Operating: 0°C to 40°C				
	Storage: -10°C to 50°C				
Humidity:	0-95% RH up to 5,000ft				
Method of Cooling:	ng: Must not exceed 80°C oil temperature. Customer provides enclosure and cooling.				
X-ray Shielding:	Customer must provide enclosure with adequate shielding. Tube emits X-rays in all directions.				
Dimensions:	81mm L X 47mm W (3.2" L X 1.8" W)				
Weight:	119g				



## 1501 Series Glass X-ray Tube



**Product Ordering Table** 

Part Number	Outline Drawing	Target	Operating Range (kV)	Max Anode Current (mA)	Max Anode Power (W)	Max Filament Current (A)	Spot Size (µm)**
90015	8194	Rh	4 - 50	2.5	50	2.4	200 Max.
90122	8257	Cr	4 - 50	2.0	75	2.4	175 Max.

Note: Part number specific copies of outline drawings and product specification sheets are available.

### Visit xray.oxinst.com or xray-sales@oxinst.com for more information.

This publication is the copyright of Oxford Instruments plc and provides outline information only, which (unless agreed by the company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or regarded as the representation relating to the products or services concerned. Oxford Instruments' policy is one of continued improvement. The company reserves the right to alter, without notice the specification, design or conditions of supply of any product or service. Oxford Instruments acknowledges all trademarks and registrations.

© Oxford Instruments plc, 2019. All rights reserved. Document reference: Part no: DS1501 - June 6, 2019



Phone: +1 (831) 439-9729 Fax: +1 (831) 439-6050 Email: xray-sales@oxinst.com



The Business of Science®

<sup>\*\*</sup>Max. = Maximum, Typ. = Typical, Nom. = Nominal (per IEC60336,NEMA XR5-1999)