

# Sealed Transmissive Microfocus X-Ray Source G-511 Series



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CE

RoHS

This radiation source achieves  $2\ \mu\text{m}$  resolution (at 6 W) by adopting a diamond window transmission target, and is an X-ray source for industrial non-destructive inspection that enables high-resolution and high-speed imaging

## FEATURES

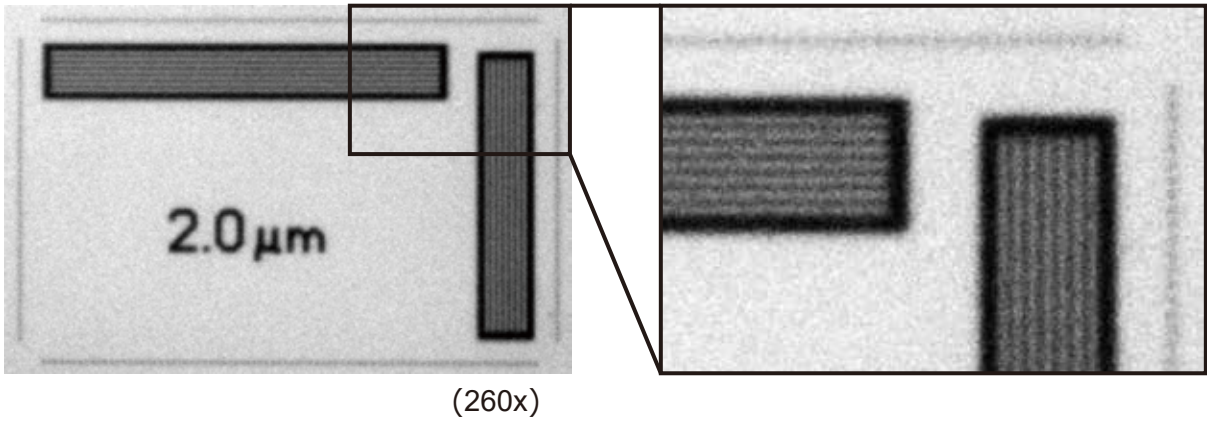
- 110 kV voltage ramp time within 1 s
  - Quick image acquisition
- Maintenance-free target
  - No need for target rotation
  - Improving equipment operation ratio
- Warming-up within 3 min.
  - Solution of the long waiting time at starting up X-ray equipment
  - No need for tube aging after long term storage
- Self-diagnosis of X-ray tube lifetime
  - Scheduled maintenance of X-ray equipment
- CE and RoHS compliant
- Hardware pulse option available, Please contact us for details



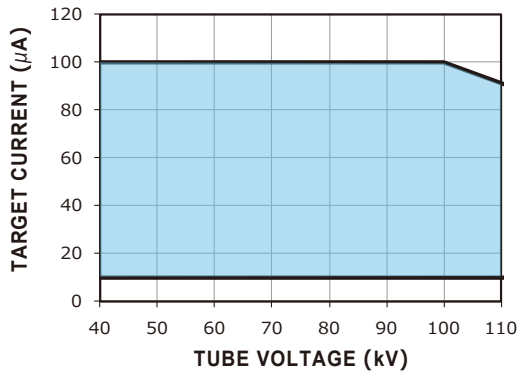
## SPECIFICATIONS

Parameter	Unit	G-511VL-D	G-511VL-DP
Tube Voltage Operational Range	kV	40 – 110	
Tube Current Operational Range (Target Current)	$\mu\text{A}$	10 – 100	
Maximum Output	W	10	
Minimum Resolution (JIMA RT RC-02B)	$\mu\text{m}$	2	
X-ray Window Material	—	Diamond	
Focus-to-Object Distance (FOD)	mm	Minimum 0.29	
Target Material	—	Tungsten	
X-ray Beam Angle	deg.	168 (Max.), 80 (80%, Equidistance)	
Weight	kg	21	
Operation	—	Continuous, Pulse	
Pulse	—	Software $\geq 1\ \text{s}$	Software $\geq 1\ \text{s}$ Hardware $\geq 50\ \text{ms}$
External Control	—	RS-232C	
Input Voltage (DC)	V	24 (+1.2, -1.2)	
Maximum Power Consumption	W	40	
Operational Ambient Temperature	$^{\circ}\text{C}$	10 – 45	
Storage Temperature	$^{\circ}\text{C}$	0 – 50	
Operational and Storage Humidity	%	$\leq 85$ (No Condensation)	
High Voltage Power Supply	—	Built-in	

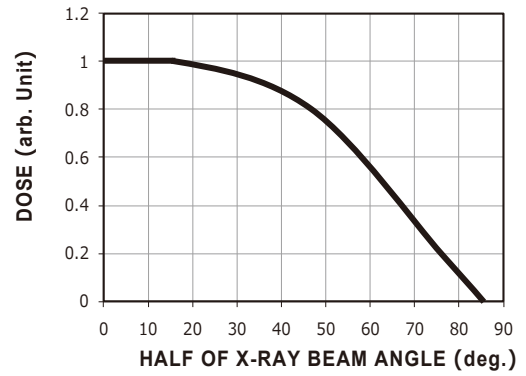
● MICRO CHART IMAGE (JIMA RT RC-02B)



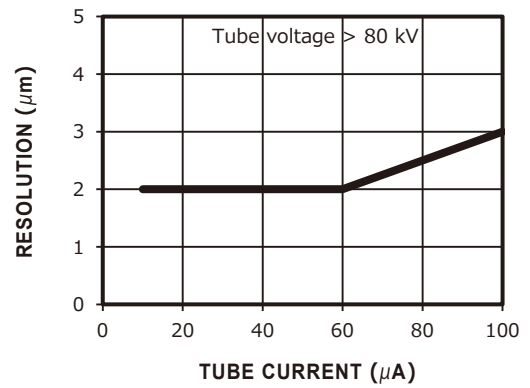
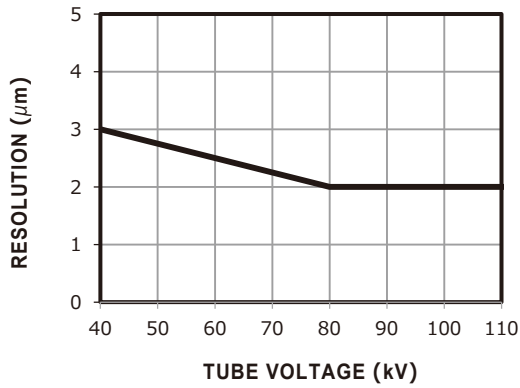
● TUBE CURRENT OPERATIONAL RANGE



● X-RAY DOSE UNIFORMITY



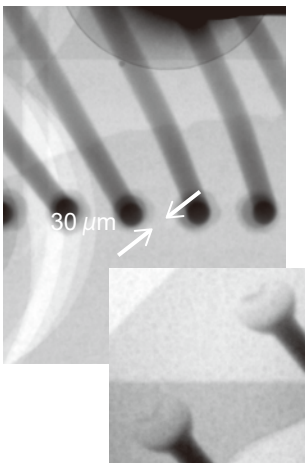
● FOCUS CHARACTERISTICS



※ The figures showed in each graph are typical values.

■ IMAGE EXAMPLES

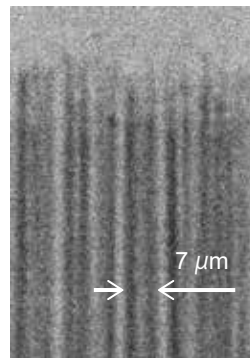
Bonding wire



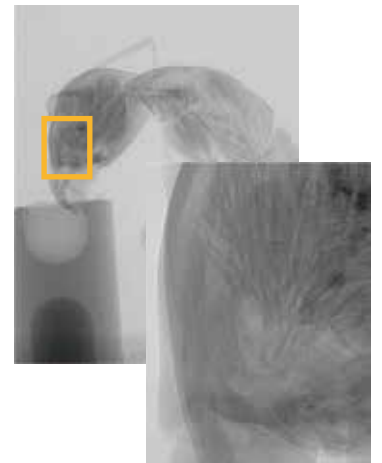
Multi Layer Ceramic Capacitor



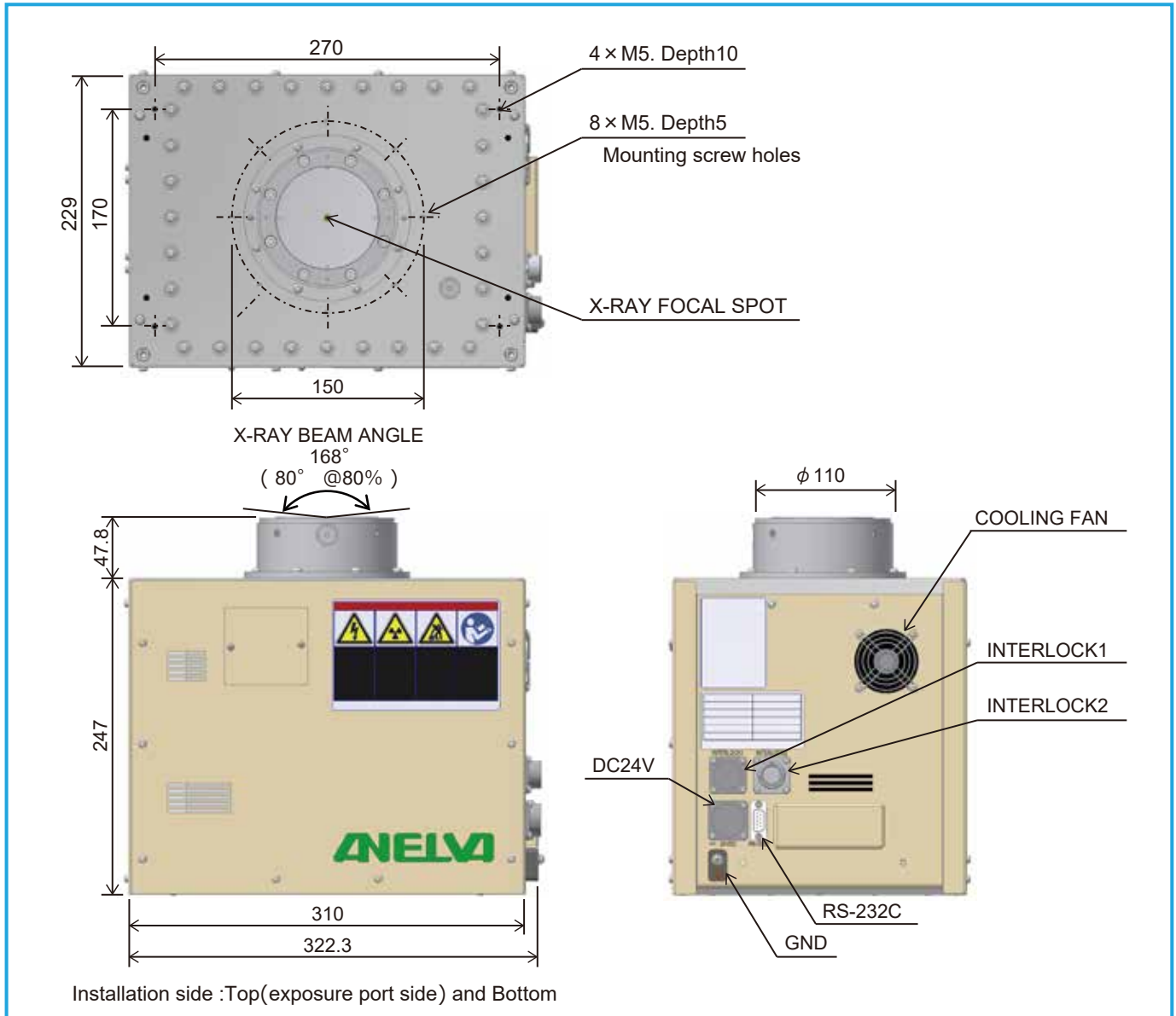
Carbon fiber



Ant



## ■ DIMENSIONAL OUTLINE (Unit:mm)



**CAUTION** The X-ray sources introduced in this material generate X-rays. To be used by qualified personnel only. Safe use is the responsibility of the operator.

**NOTICE** The X-ray sources introduced in this material were developed specifically for industrial use and can not be used for food and drinks or medical applications. Since the X-ray sources introduced in this material are subject to local laws and regulations, what you are required to use may vary from region to region. Please consult with our sales representative.

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Canon ANELVA Corporation is constantly improving its products, hence specifications are subject to change without notice.

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