

**ANALIX™
A-140-Cu**

- ◆ The ANALIX A-140-Cu Series, a water-cooled, grounded anode X-ray tube designed for X-ray diffractometry.
- ◆ The maximum input power 2.2 kW.
- ◆ Two Beryllium windows hermetically sealed to metal body.
- ◆ Standard target materials Cu.

Electrical:

Circuit:

High Voltage Generator	Constant Potential High-Voltage Generator
Grounding	Anode Grounded
Nominal X-ray Tube Voltage	60 kV
Focal Spot	0.4 × 12 mm

Mechanical:

Dimensions	See Dimensional Outline
Overall Length	188 ± 5 mm
Diameter of Maximum Part	φ 67.8 ± 0.05 mm
Target:	
Angle	Zero Degree
Material	Cu
Inherent Filtration	0.3 mm Beryllium
X-ray Beam Angle	Approx. 6°
X-ray Port	2 Directions
Weight	Approx. 2.1 kg
Cooling:	
Method	Water Cooled
Quantity of Water	Minimum 3.5 ℥/min
Temperature	Less than 35 °C
Maximum Water Pressure	490 kPa
Pressure Drop	Approx. 98 kPa

Absolute Maximum and Minimum Ratings (At any time, these values must not be exceeded)

Maximum X-ray Tube Voltage	60 kV
Minimum X-ray Tube Voltage	10 kV
Maximum X-ray Tube Current	50 mA
Maximum Filament Current	3.8 A
Filament Frequency Limits	20 kHz or Less
Maximum Input	2.2 kW

Environmental Limits

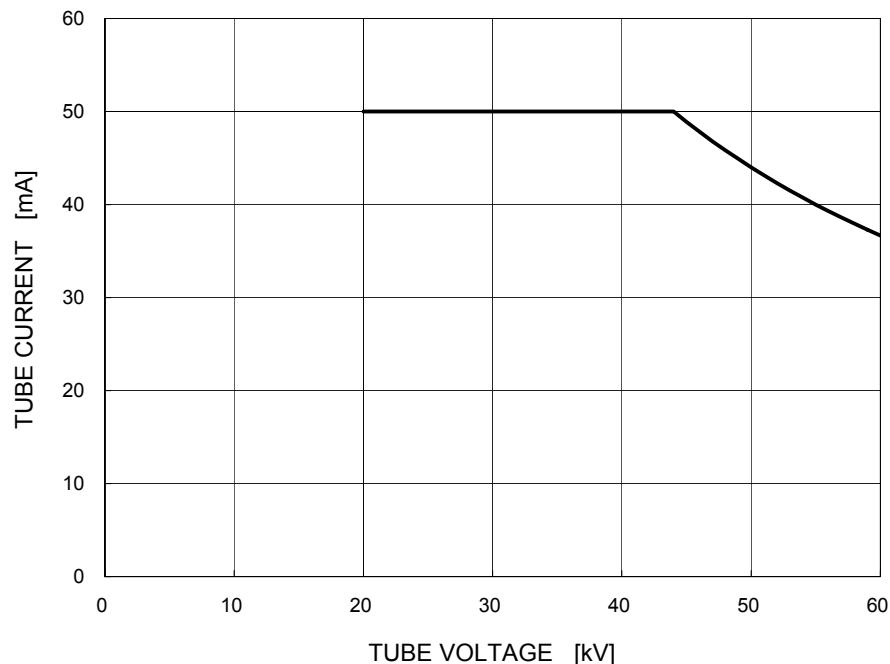
Operating Limits:

Temperature	0 ~ 40 °C
Humidity	85 % or Less (No condensation)
Atmospheric Pressure	70 ~ 106 kPa
Vibration and Shock	Use it in environment without vibration and a shock

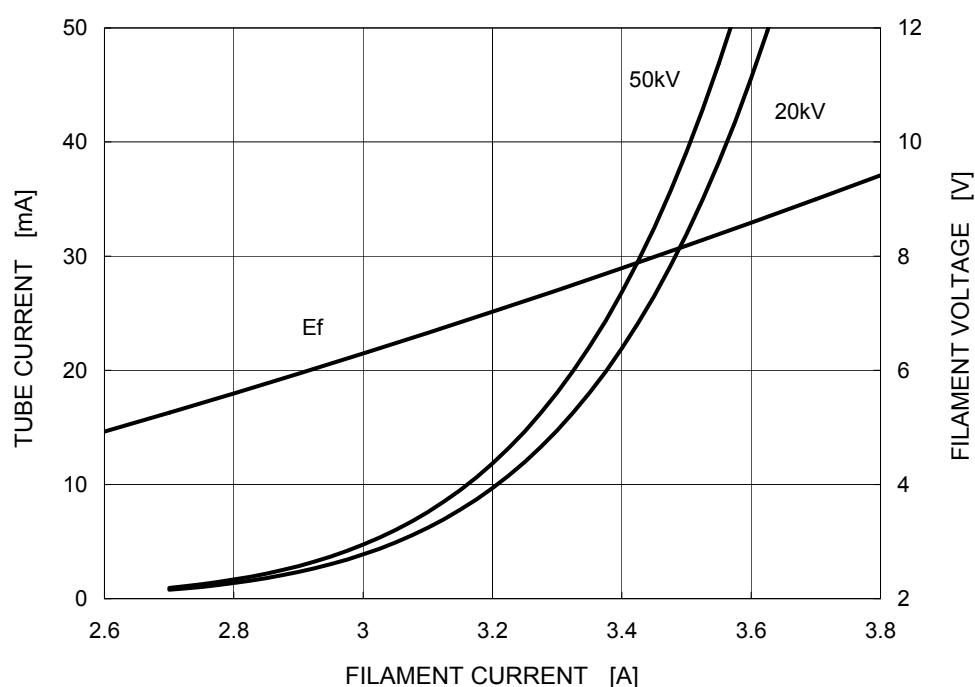
Shipping and Storage Limits:

Temperature	-20 ~ 70 °C
Humidity	85 % or Less (No condensation)
Atmospheric Pressure	50 ~ 106 kPa
Vibration	4.9 m/s ² or Less
Shock	98 m/s ² or Less

Maximum Rating Charts (Absolute Maximum Rating Charts)



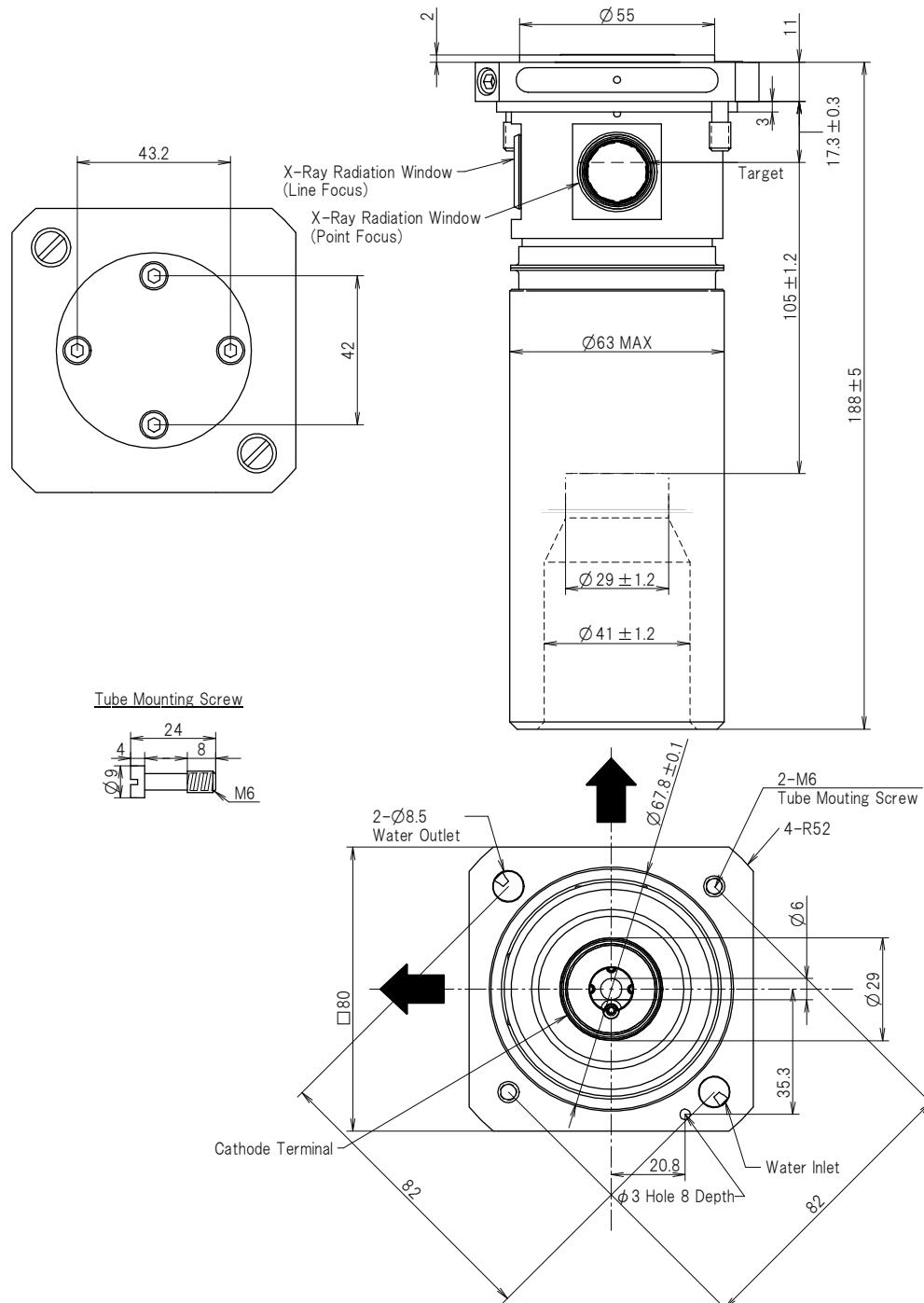
Tube Current & Filament Characteristics



For Reference Only

Dimensional Outline

Unit: mm



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• The head office of Canon Electron Tubes & Devices Co., Ltd. has been certified to meet all the requirements of Environmental Management System ISO14001.

• Canon Electron Tubes & Devices Co., Ltd. has been certified to meet all the requirements of Quality Management Systems ISO9001 and ISO13485.

Product scope is referred to the following URL. <https://etd.canon/eng/company/quality.htm>.