

**INDUSTRIAL X-RAY TUBE  
I-2123**

**X-ray Tube for Industrial Use**

- ◆ The X-ray tube I-2123, which has mini-focus 0.1, is designed for non destructive X-ray inspection.
- ◆ This tube can be used with Max. 60 kV constant potential circuit of cathode grounded.

**General Data**

**Electrical:**

Circuit:

High Voltage Generator .....	Constant Potential High-Voltage Generator
Grounding .....	Cathode and X-ray Port Grounded
Nominal X-ray Tube Voltage .....	60 kV
Nominal Focal Spot Value .....	0.1 (Resolution Method) (Cathode Bias: -20V)

**Mechanical:**

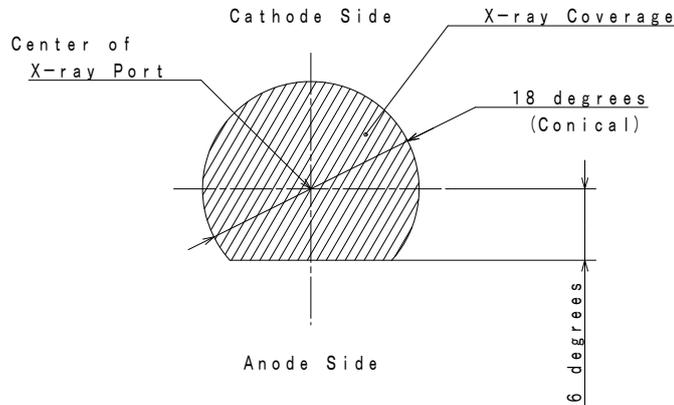
Dimensions:

Overall Length .....	96 mm
Maximum Diameter .....	φ 30.5mm
Target:	
Angle .....	10 degrees
Material .....	Tungsten
Inherent Filtration .....	Be 0.2 mm

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X-ray Coverage:

Normal to Tube Axis Direction .....	18 degrees
Cathode Side .....	9 degrees
Anode Side .....	6 degrees



Weight (Approx.) .....	Approx. 200 g
Insulating Medium .....	Insulation Oil
Cooling Method .....	Oil immersed (60°C Max.) and convection oil cooling.
Tube Holding .....	Holding the mounting flange with 8-M3 screws

**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 .....	1.2 mA
Maximum Filament Current .....	2.1 A
Filament Frequency Limit .....	DC or AC (Sine wave) 0 ~ 20 kHz
Maximum Input Power (Continuously) .....	50 W
Maximum Operating Temperature (Oil Temperature) .....	60 °C

**Environmental Limits**

Operating Limits (in dielectric oil):

Oil Temperature .....	10 ~ 60 °C
Oil pressure .....	70 ~ 140 kPa

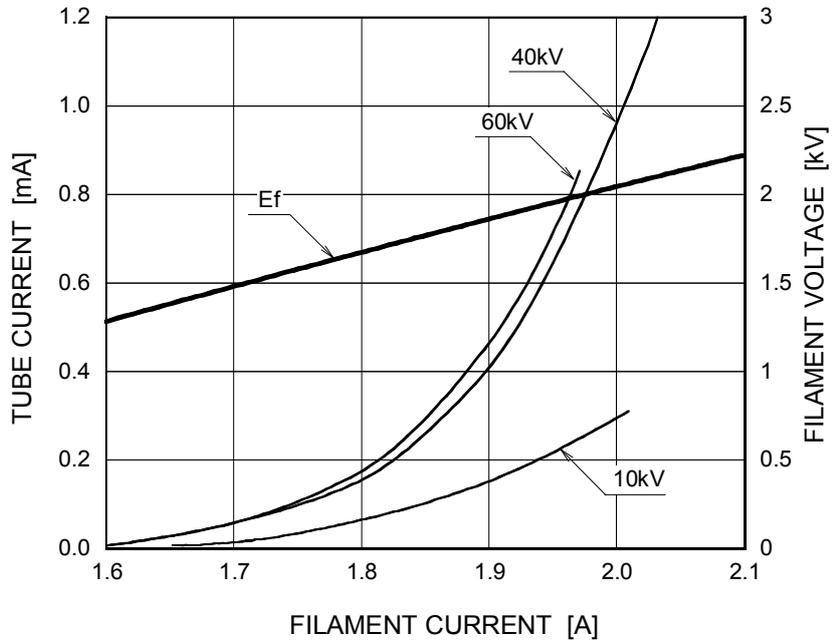
Shipping and Storage Limits:

Temperature .....	-40 ~ 70 °C
Humidity .....	10 ~ 90 %
	(No condensation)
Atmospheric Pressure .....	50 ~ 106 kPa

## Emission & Filament Characteristics

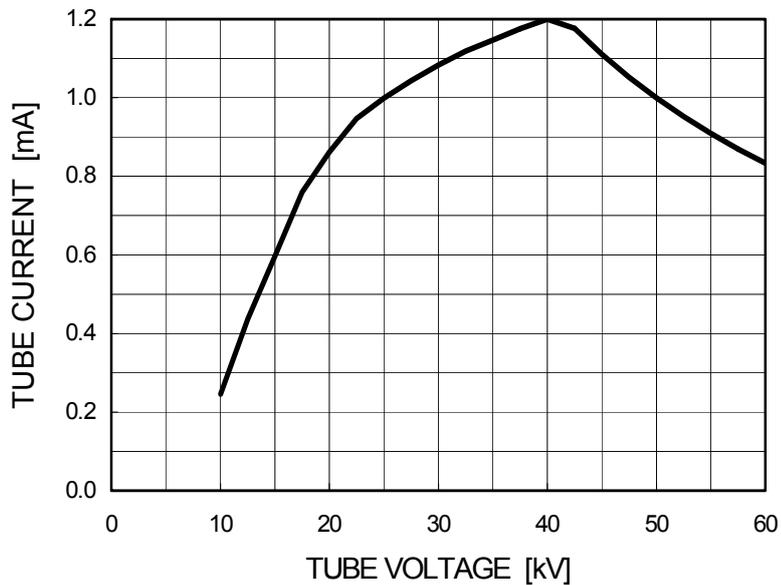
Constant Potential High-Voltage Generator

Nominal Focal Spot Value: 0.1



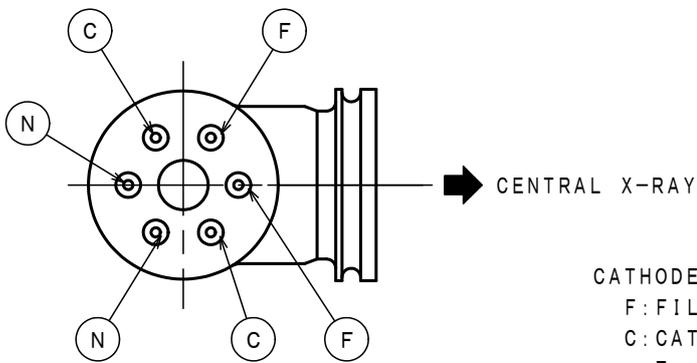
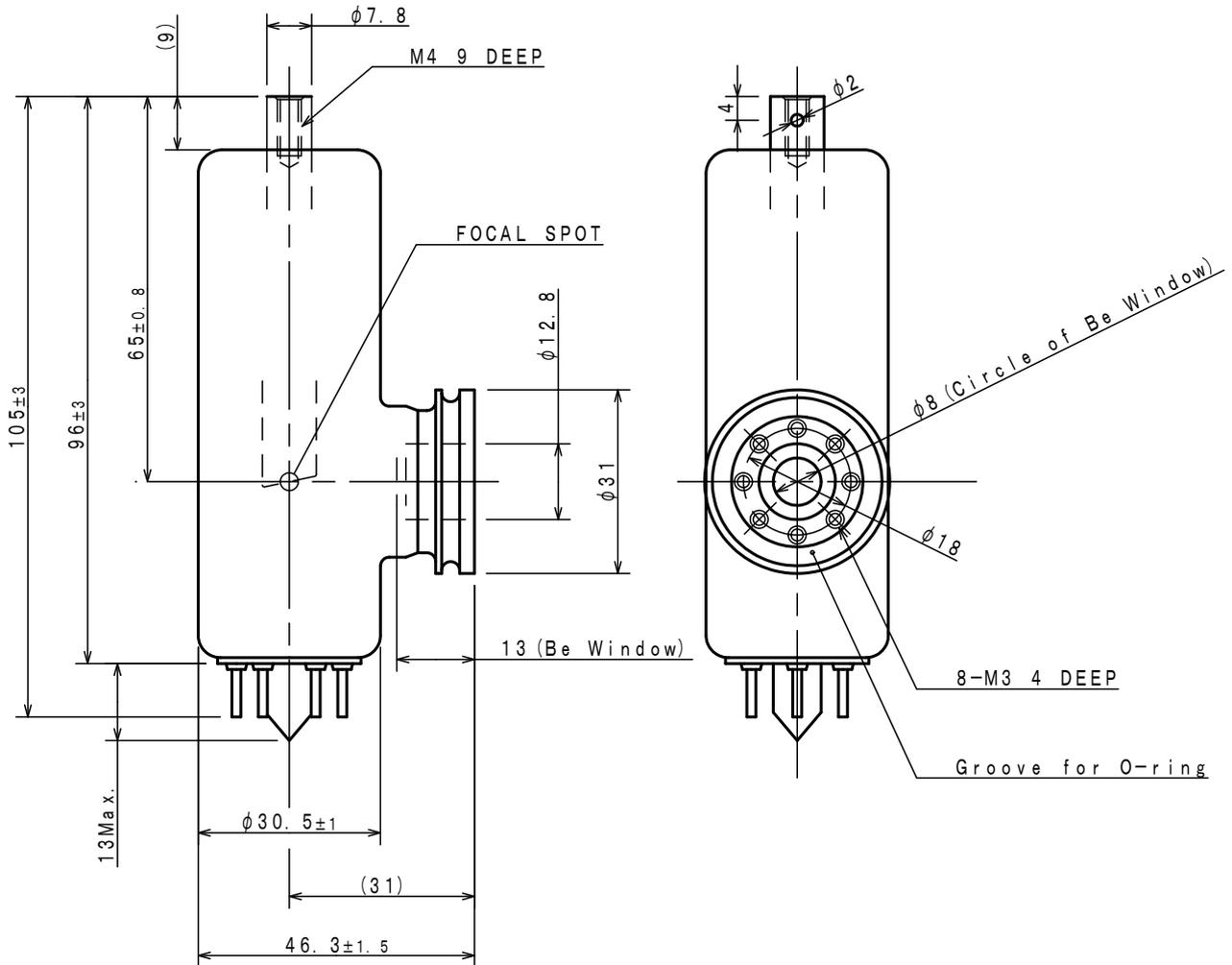
Note: This graph indicate typical characteristics.

## Maximum Input (continuous)



### Dimensional Outline

Unit: mm



**CATHODE TERMINALS**

F: FILAMENT

C: CATHODE

Terminal "C" are connected mutually inside the tube.

N: NOT FOR USE



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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>.