

**X-RAY TUBE**

**D-045**

**Stationary Anode X-ray Tube**

- ◆ Especially designed for dental radiography unit.
- ◆ This tube has focus 0.4, and is available for maximum tube voltage 70 kV.
- ◆ Installed in the same enclosure with the high voltage transformer.

**General Data**

**Electrical:**

Circuit:

High Voltage Generator .....	Constant Potential High-voltage Generator
Grounding .....	Center-grounded
Nominal X-ray Tube Voltage .....	70 kV
Nominal Focal Spot Value <sup>Note)</sup> .....	0.4
Nominal Anode Input Power (at 1.0s) (See Rating Charts) .....	585 W
Nominal Radiographic Anode Input Power .....	600 W
Exposure Duty Cycle .....	1:30 or More
	(Exposure Time: Interval Time)

Note) Test Condition: 70kV 3.2mA

**Mechanical:**

Dimensions:

Overall Length .....	See Dimensional Outline
Maximum Diameter .....	See Dimensional Outline

Target:

Anode Angle .....	12.5 degrees
Material .....	Tungsten
Inherent Filtration .....	At least 1.0 mm Al
X-ray Coverage .....	φ 70 mm at SID 200 mm
Weight .....	Approx. 100 g
Cooling Method .....	Oil immersed (60°C Max.) and convection oil cooling
Tube Holding .....	Holding the glass envelope of the anode end and cathode end or the screw of the anode shank.

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## **Absolute Maximum and Minimum Ratings**

**(At any time, these values must not be exceeded.)**

Maximum X-ray Tube Voltage .....	70 kV
Between Anode (or Cathode) and Ground .....	35 kV
Minimum X-ray Tube Voltage .....	50 kV
Maximum X-ray Tube Current (See Rating Charts) .....	12 mA
Filament Characteristics:	
Maximum Filament Current .....	3.0 A
Filament Frequency Limits .....	DC or AC (Sine Wave) 0 ~ 20 kHz
Thermal Characteristics:	
Anode Heat Content .....	4300 J
Maximum Anode Heat Dissipation .....	100 W
Maximum Radiographic Exposure Time .....	3.2 s

## **Environmental Limits**

### Operating Limits (In Dielectric Oil):

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

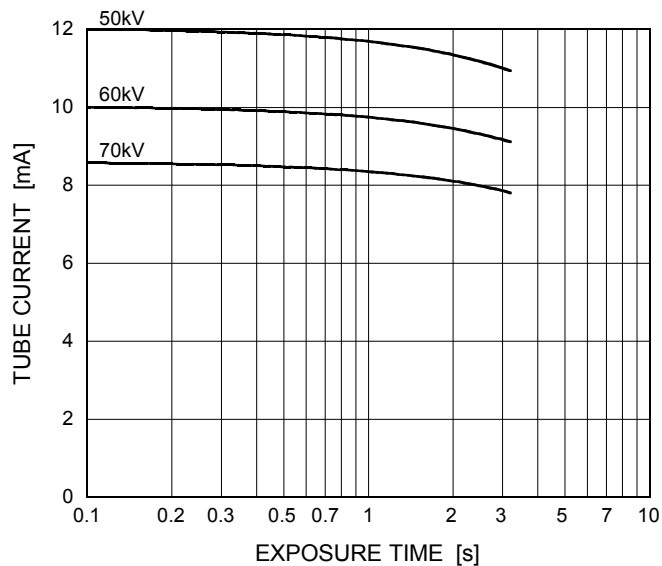
### Shipping and Storage Limits:

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

## Maximum Rating Charts (Absolute maximum rating charts)

Constant Potential High-voltage Generator

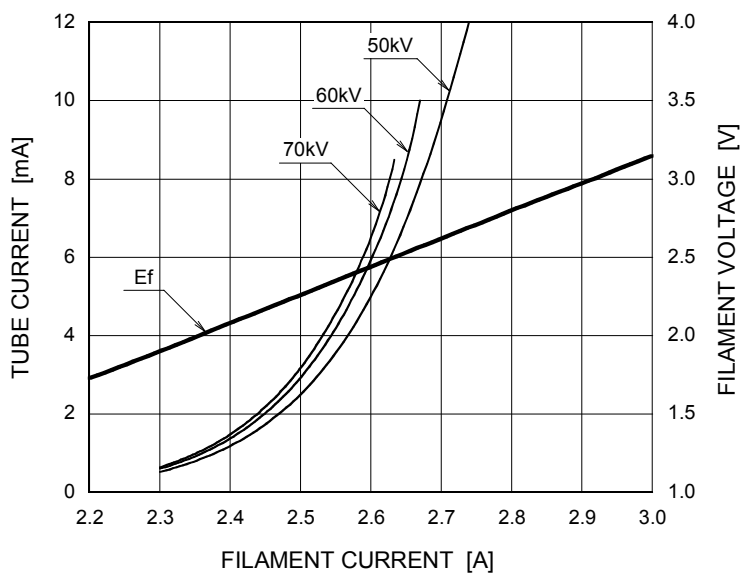
Nominal Focal Spot Value: 0.4



## Emission & Filament Characteristics

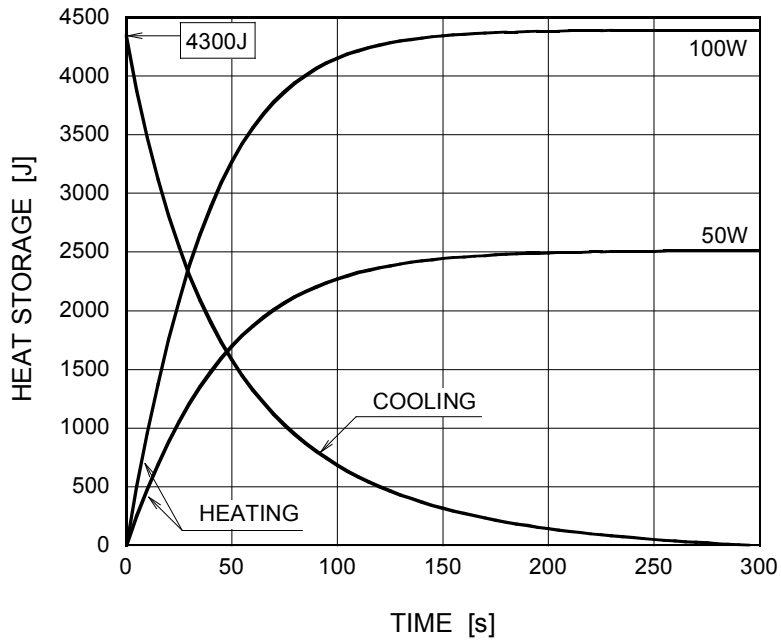
Constant Potential High-voltage Generator

Nominal Focal Spot Value: 0.4



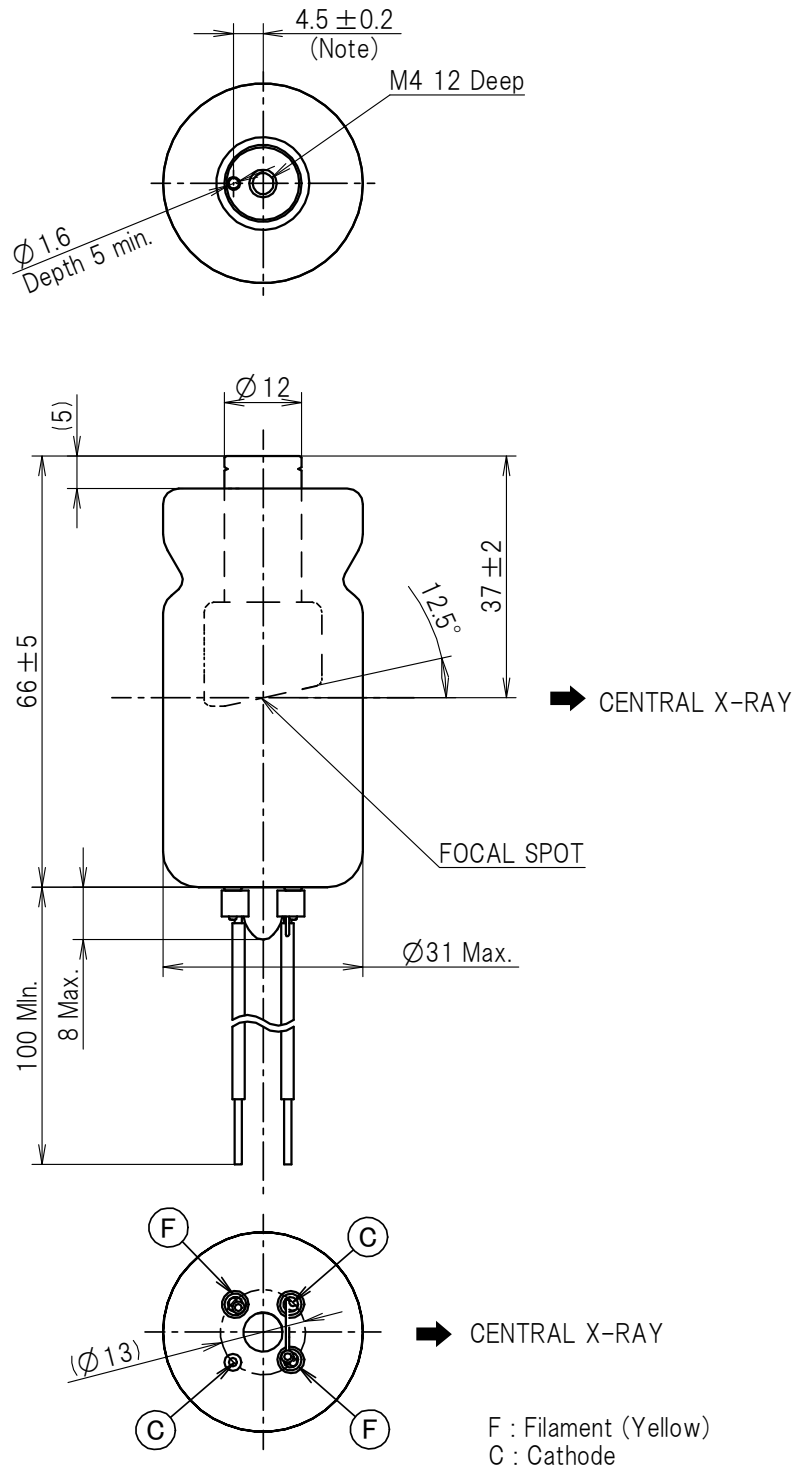
This graph indicates typical characteristics.

### Anode Heating / Cooling Curve



### Dimensional Outline

Unit: mm



Note : Dimensions from an anode shank to a mounting hole.



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