

**X-RAY TUBE
D-059SBR**

Stationary Anode X-ray Tube

- ◆ Especially designed for dental radiography unit.
- ◆ Provided with an insulation cylinder and lead cylinder.
- ◆ This tube has 0.5 focus, and is available for maximum tube voltage 120 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	120 kV
Nominal Focal Spot Value	0.5
Nominal Anode Input Power (at 1.0s)	1300 W
Nominal Radiographic Anode Input Power	1300 W

Mechanical:

Dimensions:

Overall Length	See dimensional outline
Maximum Diameter.....	See dimensional outline

Target:

Anode Angle	10 degrees
Material	Tungsten
Inherent Filtration	At least 0.8 mm Al equivalent at 50 kV
X-ray Coverage	160 × 360 mm at SID 550 mm
Weight	Approx. 1320 g
Cooling Method	Oil immersed (60°C Max.) and convection oil cooling
Tube Holding	Holding the insulation cylinder

★The information contained herein is presented only as a guide for the application of our products. No responsibility is assumed by Canon Electron Tubes & Devices Co., Ltd. (CETD) for any infringements of patents or other rights of the third parties which may result from its use.
No license is granted by implication or otherwise under any patent or patent rights of CETD or others.
★The information contained herein may be changed without prior notice. It is therefore, advisable to contact to CETD before processing with the design of equipment incorporating this product.

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

Maximum X-ray Tube Voltage	120 kV
Between Anode (or Cathode) and Ground	60 kV
Minimum X-ray Tube Voltage	60 kV
Maximum X-ray Tube Current	20.0 mA
	(See rating charts)
Maximum Filament Current	3.5 A
Filament Voltage:	
At maximum filament current (3.5 A)	3.4 ~ 4.9 V
Filament Frequency Limits	DC or AC (Sine Wave) 0 ~ 20 kHz
Thermal Characteristics:	
Anode Heat Content	28 kJ
Maximum Anode Heat Dissipation	250 W
Maximum Exposure Time	25 s

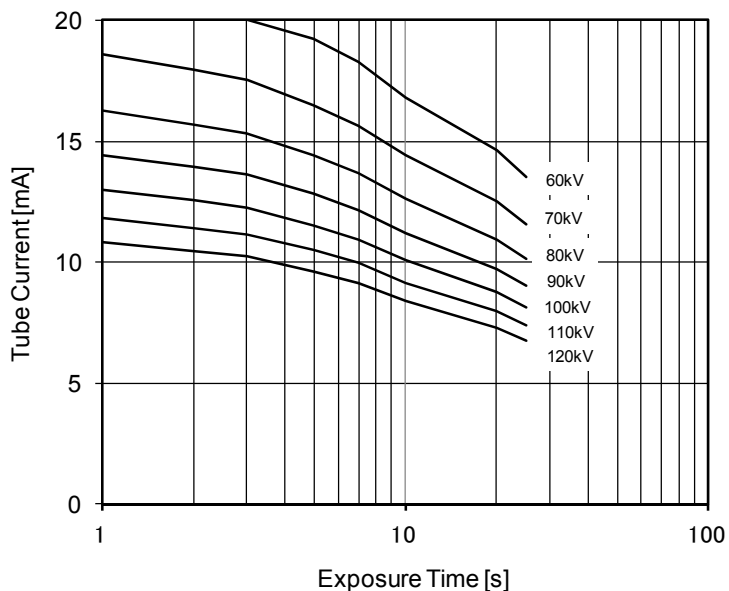
Environmental Limits

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

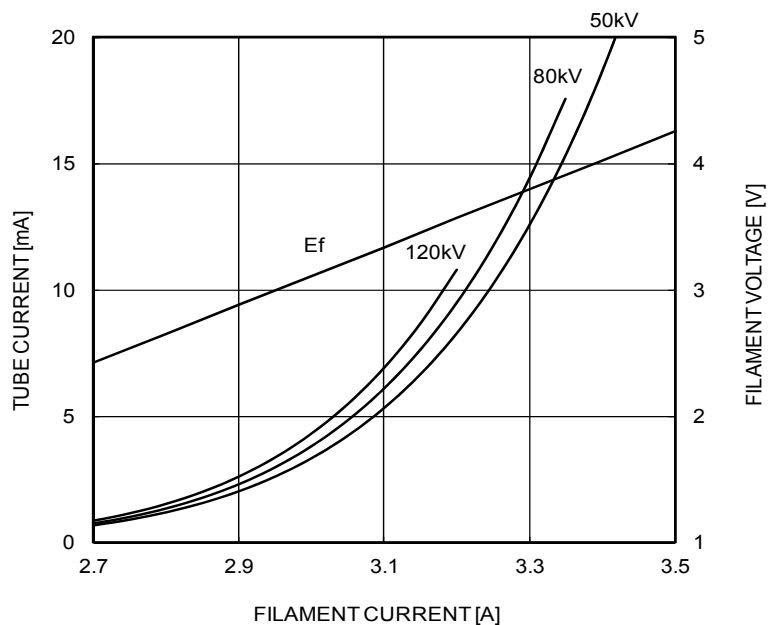
Nominal Focal Spot Value: 0.5



Emission & Filament Characteristics

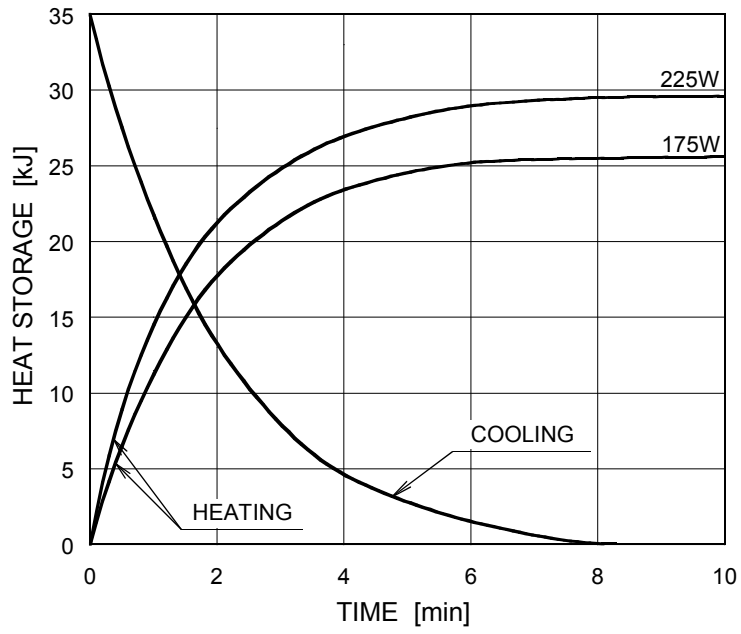
Constant Potential High-Voltage Generator

Nominal Focal Spot Value: 0.5



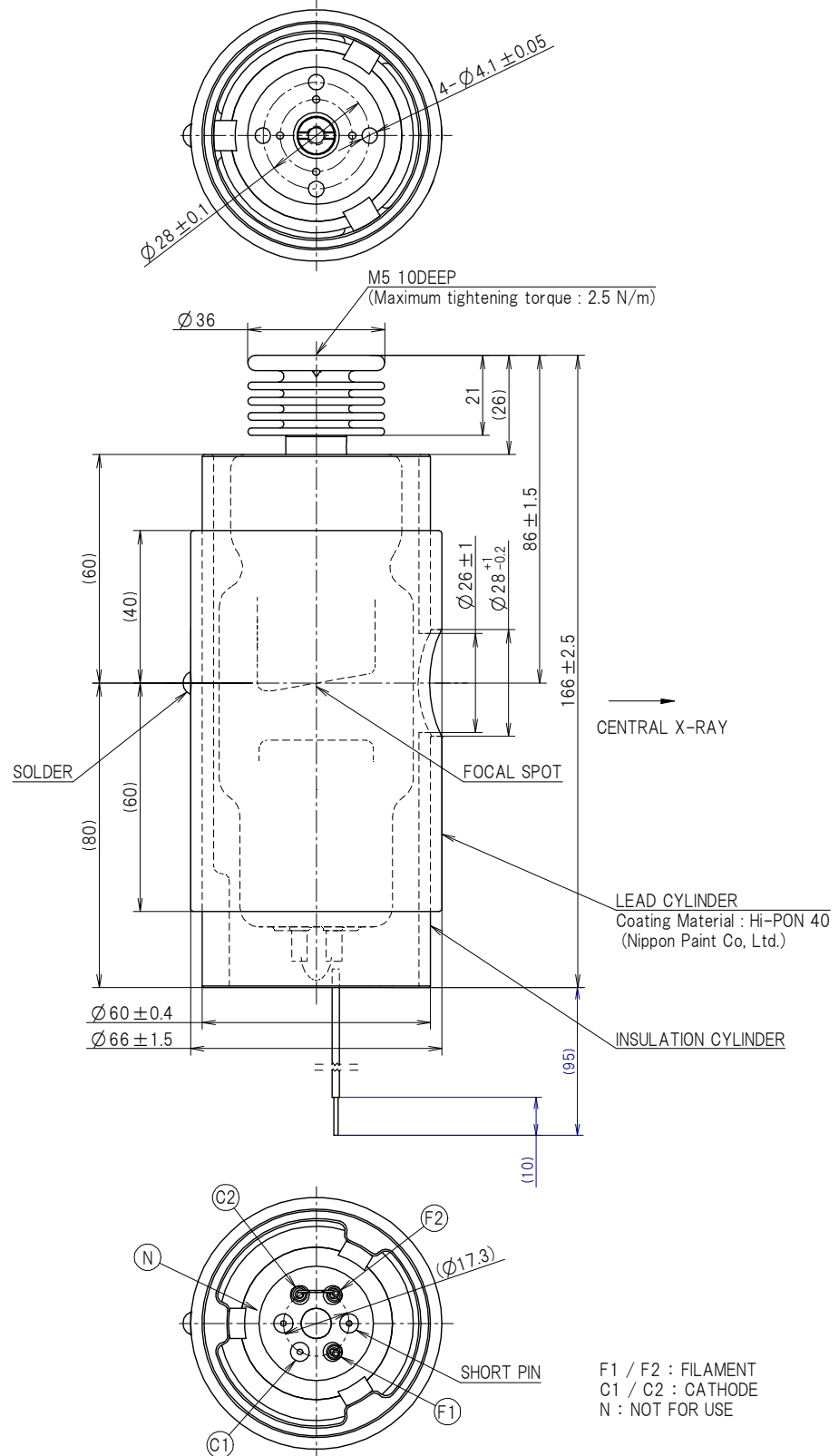
This graph indicates typical characteristics.

Anode Heating / Cooling Curve



Dimensional Outline of D-059SBR

Unit: mm





CANON ELECTRON TUBES & DEVICES CO., LTD.

Marketing Engineering Group, Sales Department
1385, Shimoishigami, Otawara-shi, Tochigi 324-8550, Japan
Tel: +81-287-26-6666 Fax: +81-287-26-6060
<https://etd.canon>

·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>.