

**ROTANODE™  
E7846**

**Rotating Anode X-ray Tube**

- ◆ Rotating anode X-ray tube for the purpose of general diagnostic X-ray procedures.
- ◆ Specially processed Rhenium-tungsten faced molybdenum target of 58 mm diameter.
- ◆ This tube has foci 1.3 and 0.6, and is available for a maximum tube voltage 130 kV.



**General Data**

**Application** ..... **General Radiography**

**Electrical:**

Circuit:

High Voltage Generator ..... Constant Potential High-Voltage Generator

Grounding ..... Center-grounded

Nominal X-ray Tube Voltage:

Radiographic ..... 130 kV

Nominal Focal Spot Value:

Large Focus ..... 1.3

Small Focus ..... 0.6

Nominal Anode Input Power (at 0.1s) ..... See rating charts

Large Focus ..... 32 kW

Small Focus ..... 11 kW

Nominal Radiographic Anode Input Power:

Large Focus ..... 29 kW

Small Focus ..... 10 kW

Anode Speed:

50 Hz ..... Minimum 2700 min<sup>-1</sup>

Mode of Operation ..... Intermittent

★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.

**Mechanical:**

Dimensions .....	See dimensional outline
Overall Length (Refer to Dimensional Outline) .....	220 mm
Maximum Diameter .....	81 mm
Target:	
Anode Angle .....	13.5 degrees
Diameter .....	58 mm
Construction .....	Rhenium-Tungsten faced Molybdenum
Inherent Filtration .....	At least 0.7mm Al at 75 kV
Weight (Approx.) .....	1.2 kg
Cooling Method .....	Oil immersed (80°C Max.) and convection oil cooling

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

## Maximum X-ray Tube Voltage:

Radiographic .....	130 kV
Between Anode (or Cathode) and Ground .....	65 kV
Minimum X-ray Tube Voltage .....	50 kV
Maximum X-ray Tube Current .....	See rating charts
Large Focus .....	560 mA
Small Focus .....	220 mA

## Maximum Filament Current:

Large Focus .....	5.2 A
Small Focus .....	4.8 A

## Filament Voltage:

Large Focus (At maximum filament current 5.2 A) .....	6.74 ~ 9.12 V
Small Focus (At maximum filament current 4.8 A) .....	5.79 ~ 7.83 V

Filament Frequency Limits .....

Continuous Anode Input Power .....

## Thermal Characteristics:

Anode Heat Content .....	80 kJ (107 kHU)
Maximum Anode Heat Dissipation .....	250 W

## Environmental Limits

### Operating Limits (in dielectric oil):

Oil Temperature ..... 10 ~ 80 °C

Oil Pressure ..... 70 ~ 140 kPa

### Shipping and Storages Limits:

Temperature ..... -20 ~ 70 °C

Humidity ..... 20 ~ 90 %

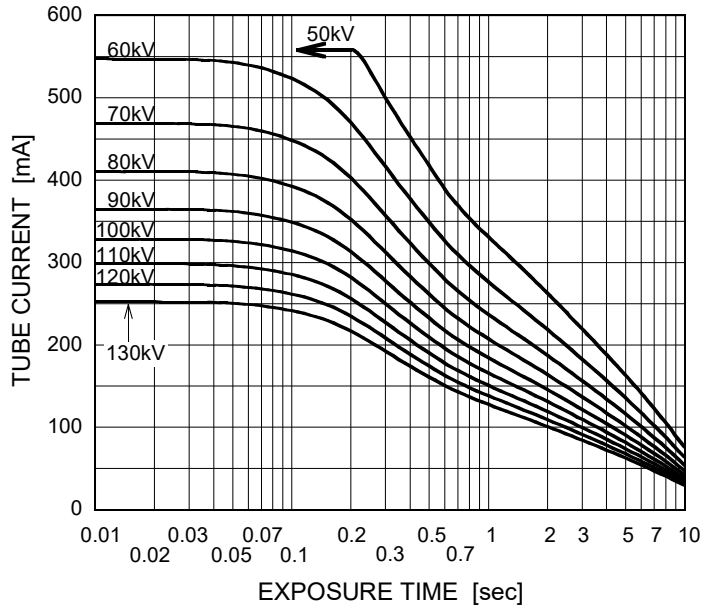
(No condensation)

Atmospheric Pressure ..... 50 ~ 106 kPa

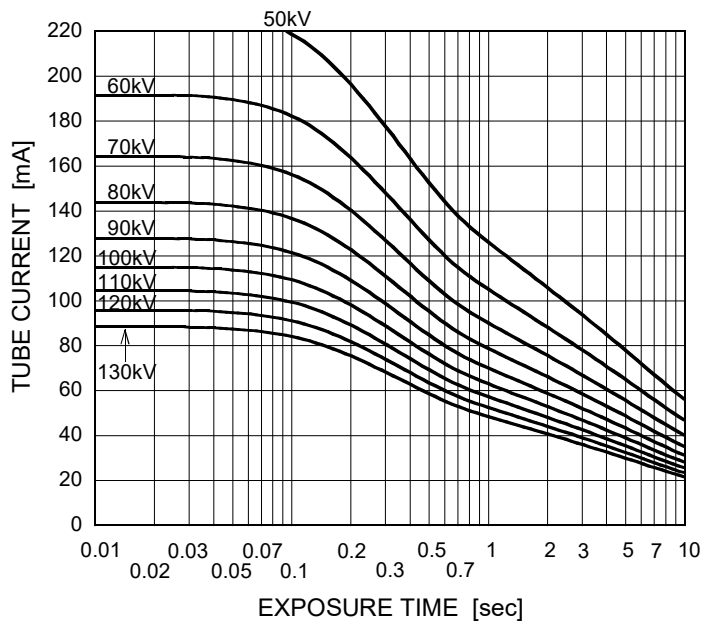
## Maximum Rating Charts (Absolute Maximum Rating Charts)

Conditions: Tube Voltage  
Constant Potential High-Voltage Generator  
Stator Power Frequency 50 Hz

Nominal Focal Spot Value: 1.3 ■



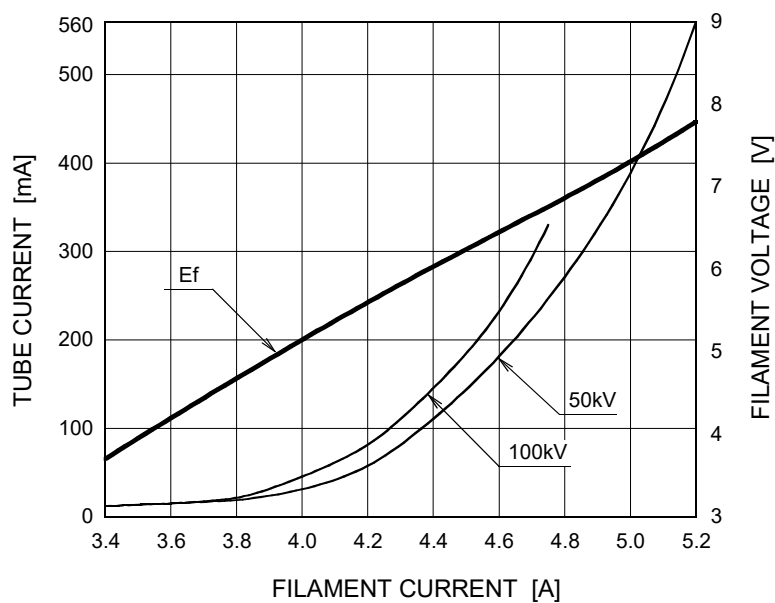
Nominal Focal Spot Value: 0.6 □



## Emission & Filament Characteristics

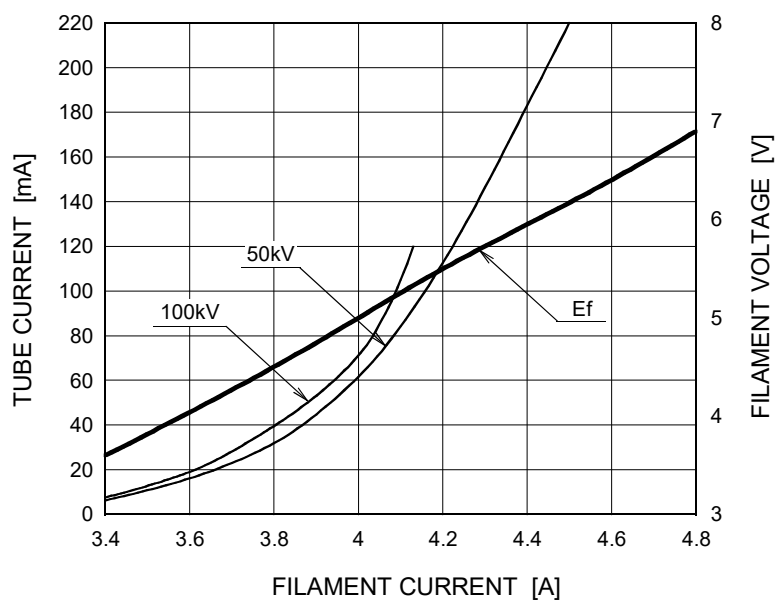
Constant Potential High-Voltage Generator

Nominal Focal Spot Value: 1.3 ■



For Reference Only

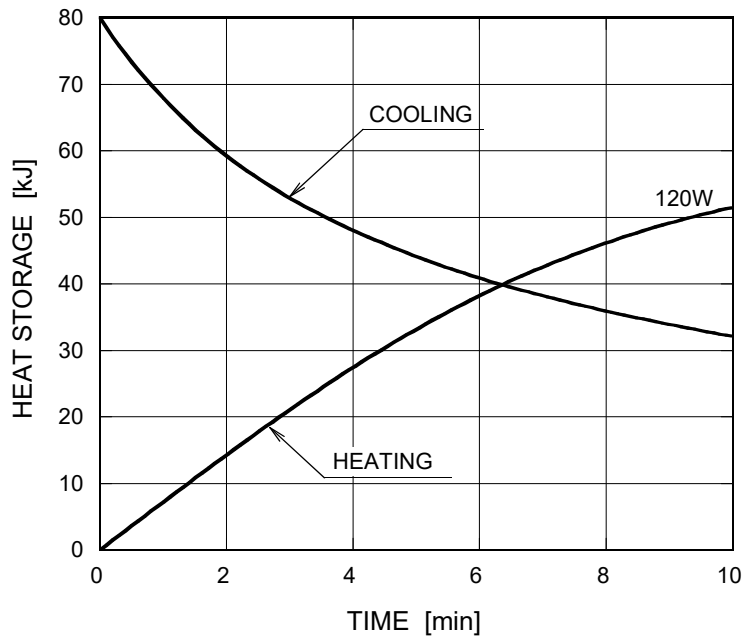
Nominal Focal Spot Value: 0.6 □



For Reference Only

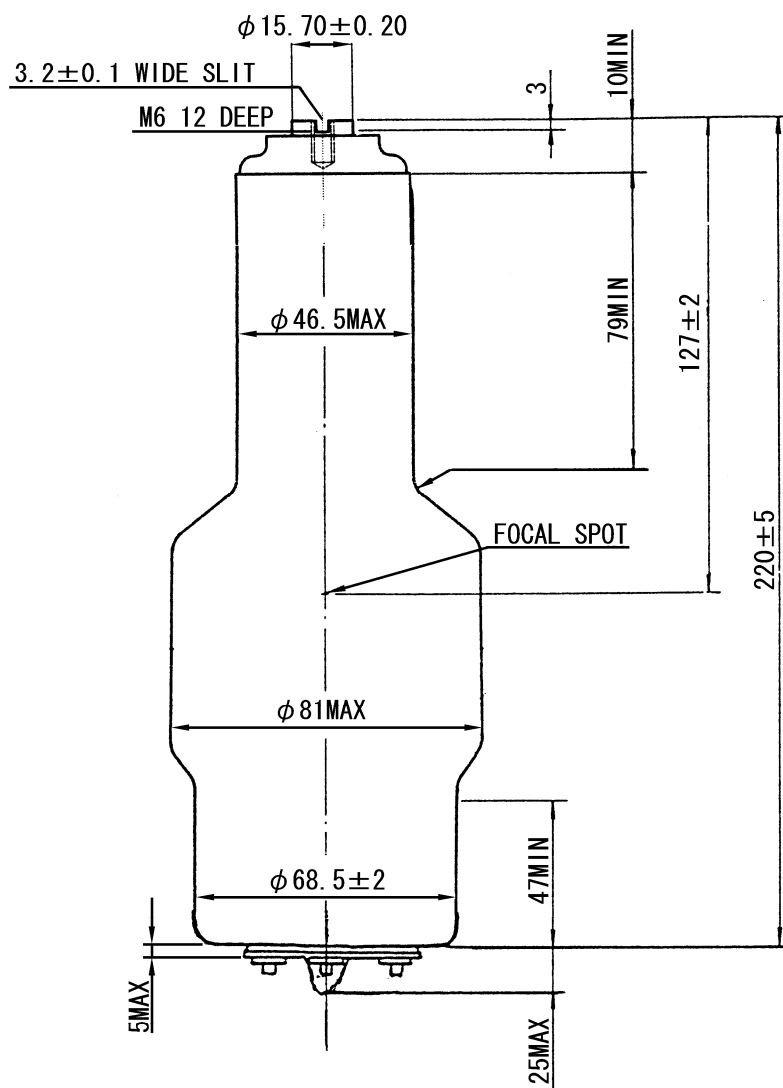
## Thermal Characteristics

Anode Heating / Cooling Curve



## Dimensional Outline

Unit mm



CENTRAL X-RAY

