X-RAY TUBE
D-125
D-125S
D-125SB

Stationary Anode X-ray Tube

- Especially designed for dental X-ray unit.
- Provided with on insulation cylinder (D-125S) and lead cylinder (D-125SB).
- These tubes have focus 1.2, and are available for maximum tube voltage 100 kV or 125 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:
- D-125 ..... 125 kV
- D-125S, D-125SB ..... 100 kV

Nominal Focal Spot Value 1.2
Nominal Anode Input Power (at 1.0s) (See rating charts) ..... 2700 W
Nominal Radiographic Anode Input Power ..... 2900 W
Exposure Duty Cycle ..... 1:60 or more
(Exposure Time : Interval Time)

Mechanical:

Dimensions:
- Overall Length ..... See dimensional outline
- Maximum Diameter ..... See dimensional outline

Target:
- Anode Angle ..... 16 degrees
- Material ..... Tungsten

Inherent Filtration ..... At least 0.8 mm Al at 50 kV
X-ray Coverage ..... 354 × 354 mm at SID 750 mm

Weight (approx.):
- D-125 ..... 350 g
- D-125S ..... 430 g
- D-125SB ..... 780 g

Cooling Method ..... Oil immersed (60℃ Max.) and convection oil cooling.

Tube Holding:
- D-125 ..... Holding the glass envelope of the anode end and cathode end, or the screw of the anode shank.
- D-125S ..... Holding the insulation cylinder.
- D-125SB ..... Holding the Insulation cylinder or the lead cylinder.

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

Maximum X-ray Tube Voltage:
- D-125 ..... 125 kV
- D-125S, D-125SB ..... 100 kV

Between Anode (or Cathode) and Ground:
- D-125 ..... 62.5 kV
- D-125S, D-125SB ..... 50 kV

Minimum X-ray Tube Voltage ..... 40 kV

Maximum X-ray Tube Current ..... 40 mA

Maximum Filament Current ..... 3.1 A

Filament Voltage:
- At maximum filament current (3.1A) ..... 2.7 ~ 3.6 V

Filament Frequency Limits ..... DC or AC (Sine Wave) 0 ~ 20 kHz

Thermal Characteristics:
- Anode Heat Content ..... 35 kJ
- Maximum Anode Heat Dissipation ..... 250 W

Maximum Radiographic Exposure Time ..... 10 s

Environmental Limits

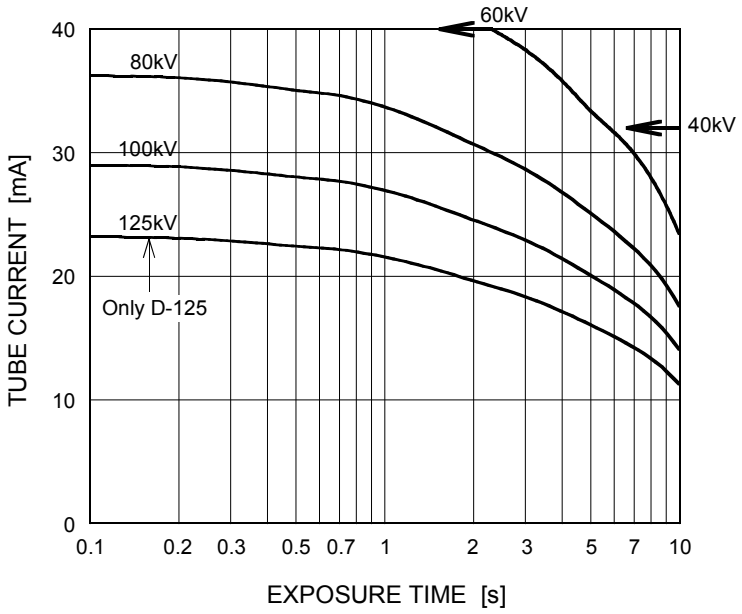
Operating Limits (in dielectric oil):
- Oil Temperature ..... 10 ~ 60℃
- Oil pressure ..... 70 ~ 140 kPa

Shipping and Storage Limits:
- Temperature ..... -40 ~ 70℃
- Humidity ..... 10 ~ 90 % (No condensation)
- Atmospheric Pressure ..... 50 ~ 106 kPa

Maximum Rating Charts
(Absolute maximum rating charts)

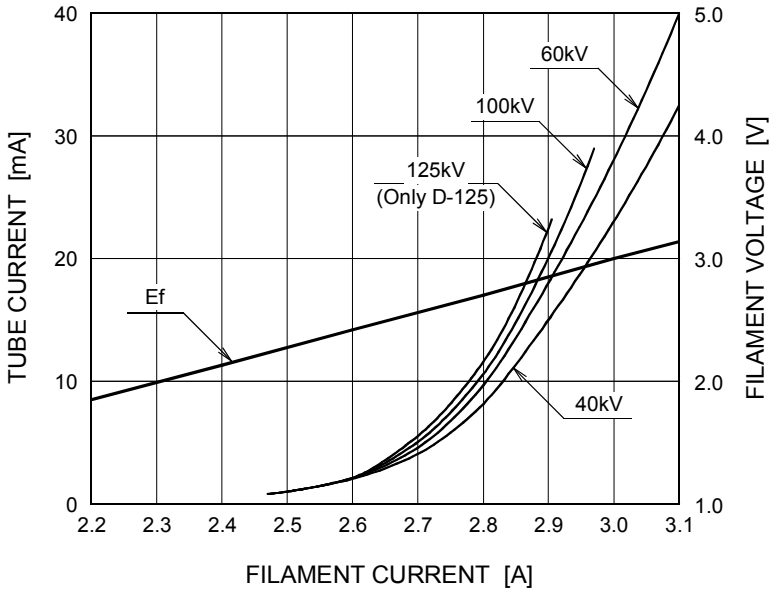
Constant Potential High-Voltage Generator

Nominal Focal Spot Value:1.2



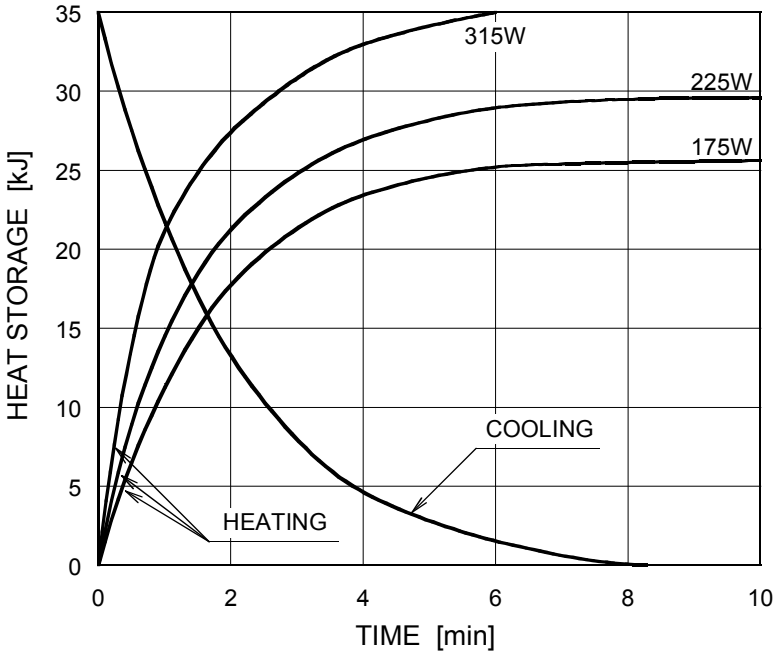
Emission & Filament Characteristics

Constant Potential High-Voltage Generator



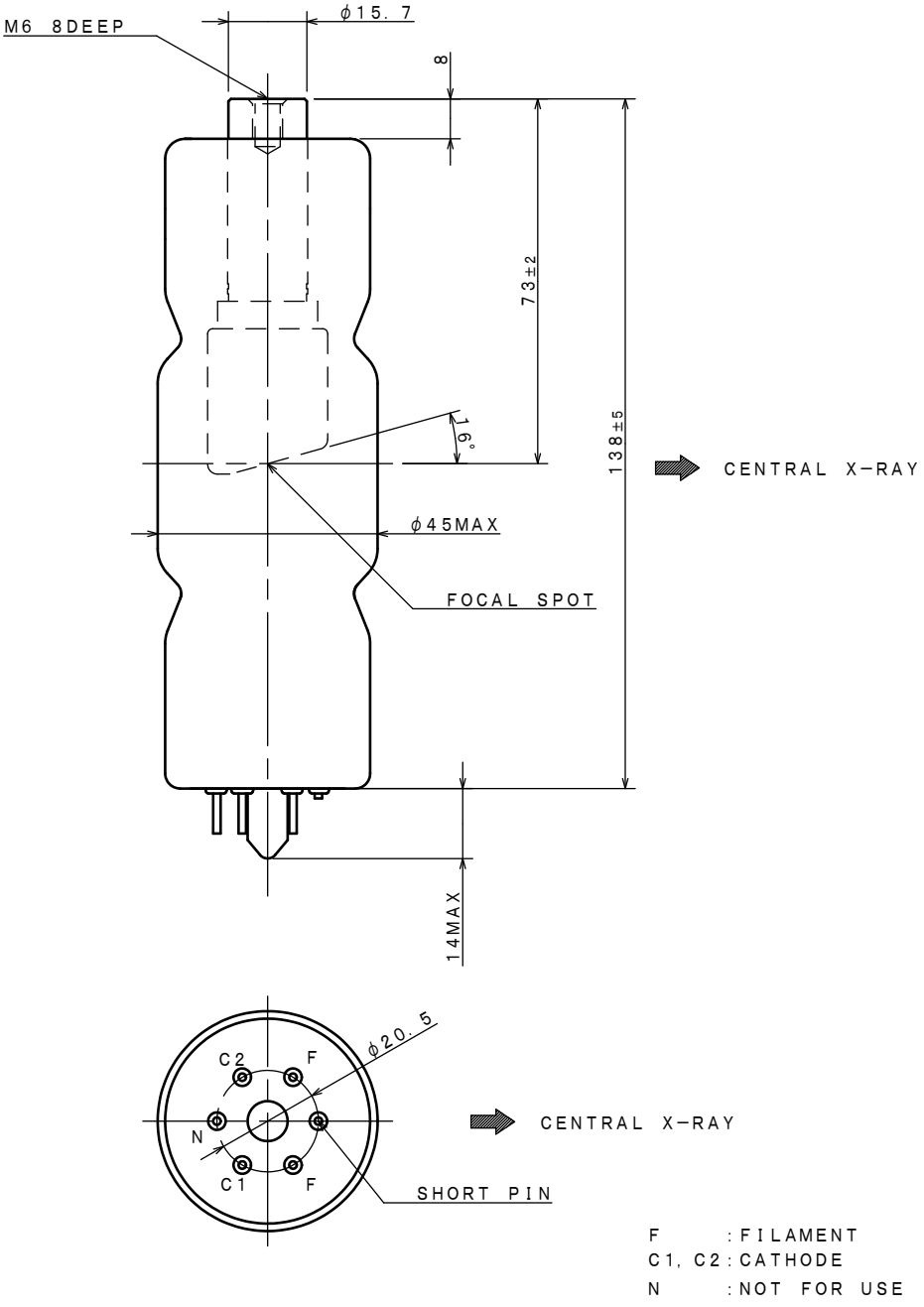
This graph indicates typical characteristics.

Anode Heating / Cooling Curve



Dimensional Outline of D-125

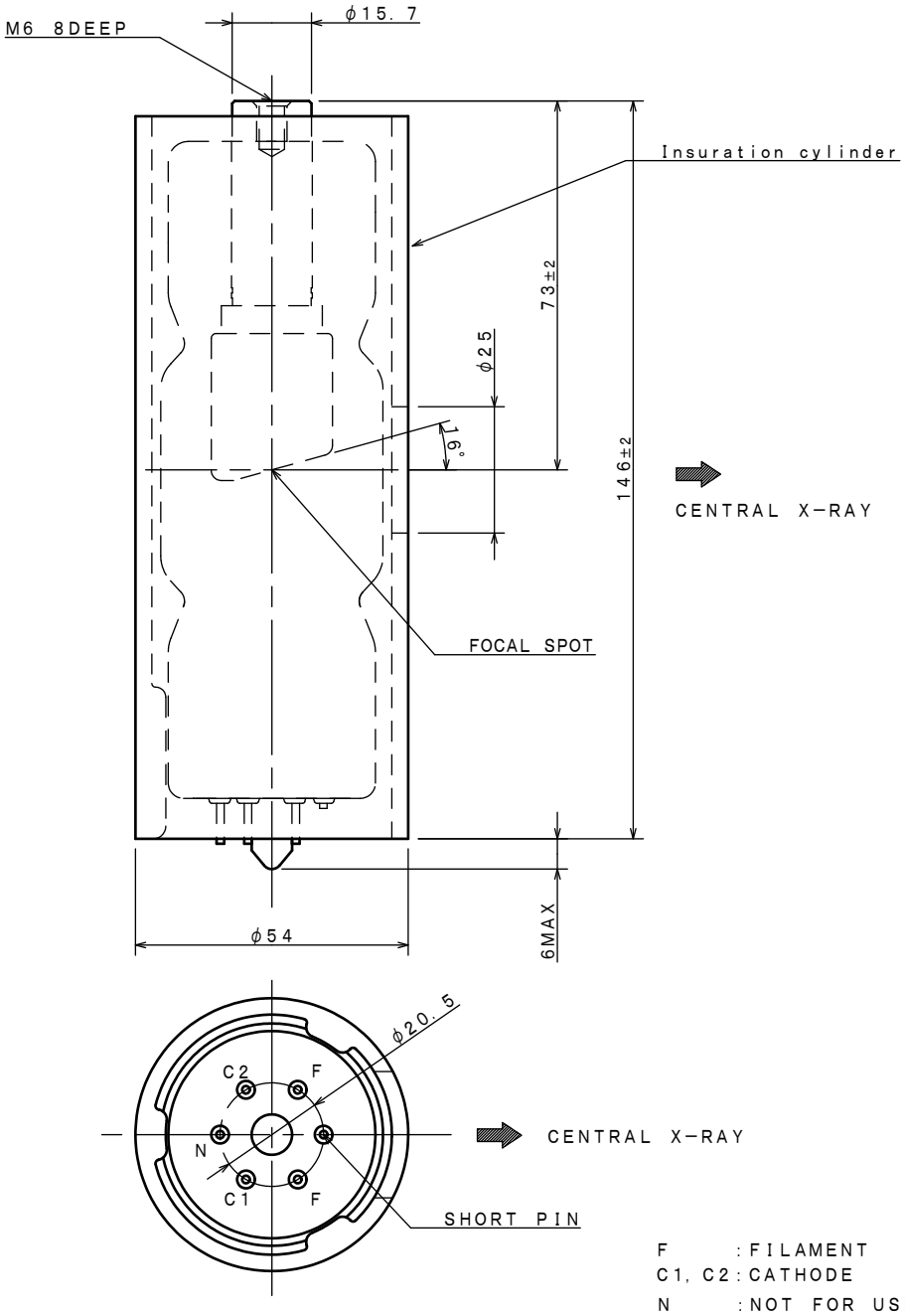
Unit: mm



F : FILAMENT
C1, C2 : CATHODE
N : NOT FOR USE

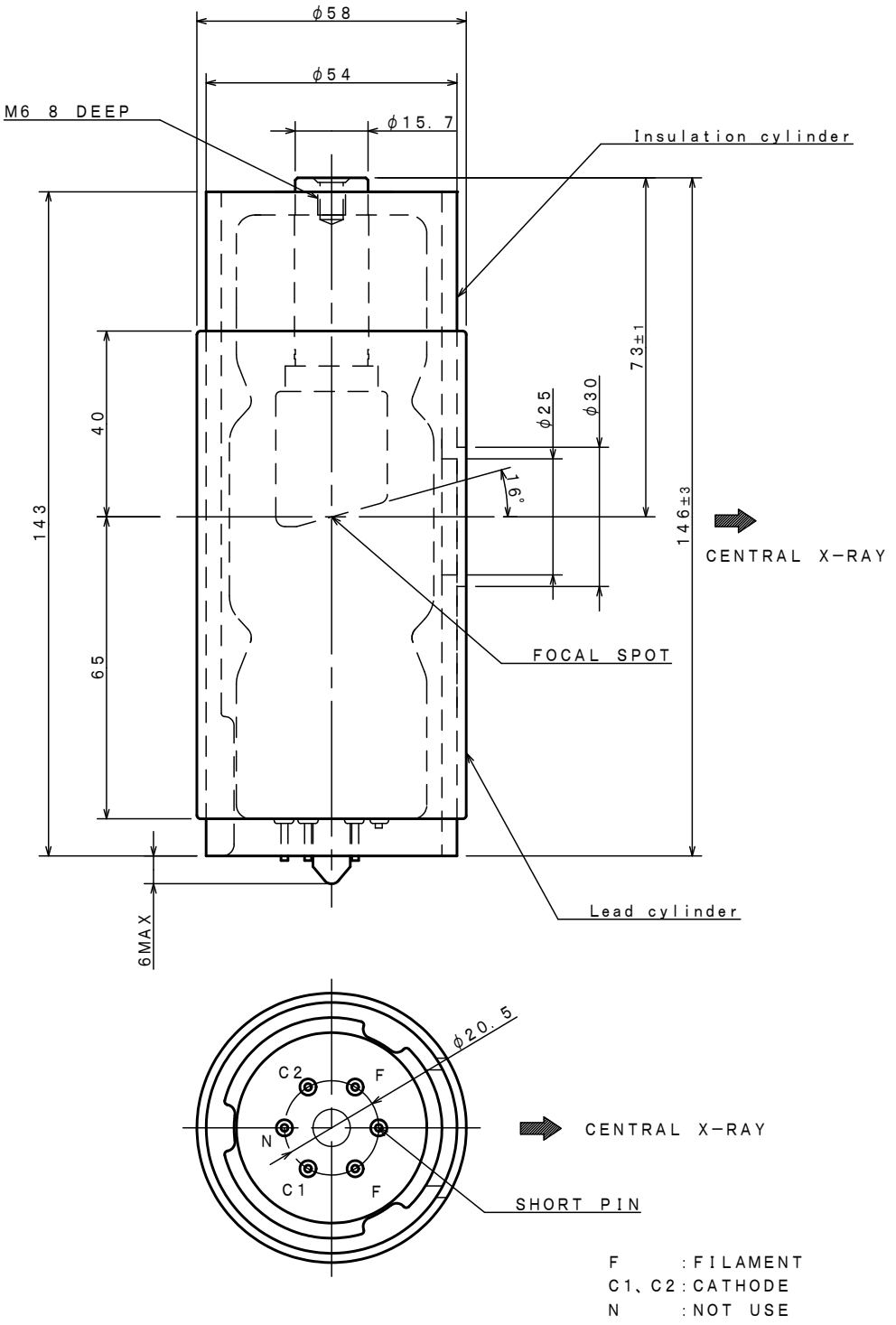
Dimensional Outline of D-125S

Unit: mm



Dimensional Outline of D-125SB

Unit: mm



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・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.

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