

**TOSHIBA X-RAY TUBE
D-067 / D-067SB**

Stationary Anode X-ray Tube

- ◆ Especially designed for dental radiography unit.
- ◆ Provided with an insulation cylinder and lead cylinder.
- ◆ These tubes have 0.6 focus, and are available for maximum tube voltage 100 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	100 kV
Nominal Focal Spot Value	0.6
Nominal Anode Input Power (at 1.0s)	1270 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	12 degrees
Material	Tungsten
Inherent Filtration	At least 0.8 mm Al at 50 kV
X-ray Coverage	200 x 340 mm at SID 550 mm

Weight:

D-067	Approx. 320 g
D-067SB	Approx. 780 g
Cooling Method	Oil immersed (60°C Max.) and convection oil cooling.

Tube Holding:

D-067	Holding the glass envelope of the anode end and cathode end, or the screw of the anode shank
D-067SB	Holding the insulation cylinder or lead cylinder

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

Maximum X-ray Tube Voltage	100 kV
Between Anode (or Cathode) and Ground	50 kV
Minimum X-ray Tube Voltage	50 kV
Maximum X-ray Tube Current	22 mA
Maximum Filament Current	3.5 A
Filament Voltage (At maximum filament current)	3.4 ~ 4.6 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	20 s

Environmental Limits

Operating Limits (in dielectric oil):

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

Shipping and Storage Limits:

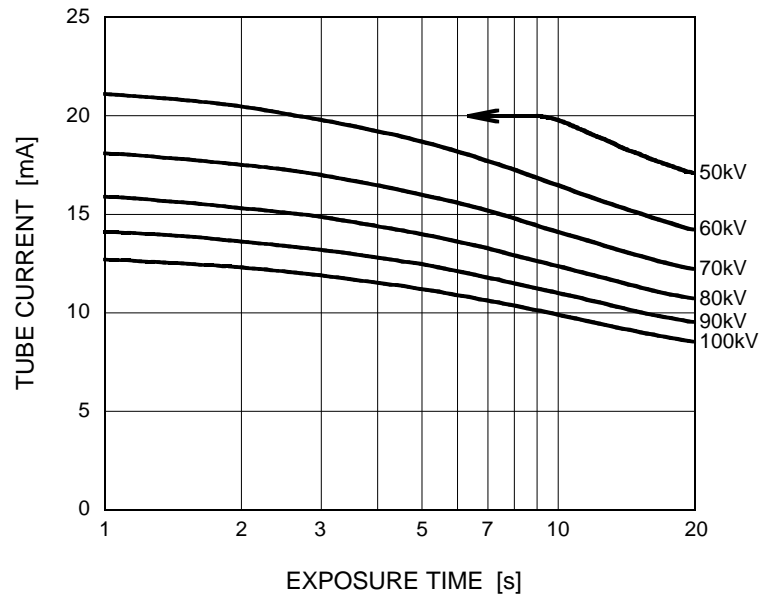
Temperature	-40 ~ 70 °C
Humidity	10 ~ 90 %
	(No condensation)

Atmospheric Pressure	50 ~ 106 kPa
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Maximum Rating Charts (Absolute maximum rating charts)

Constant Potential High-Voltage Generator

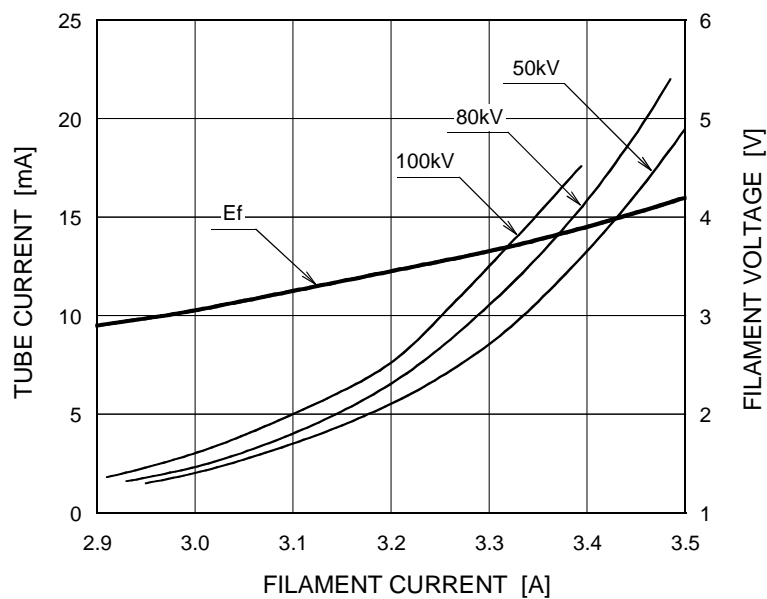
Nominal Focal Spot Value: 0.6



Filament & Emission Characteristics

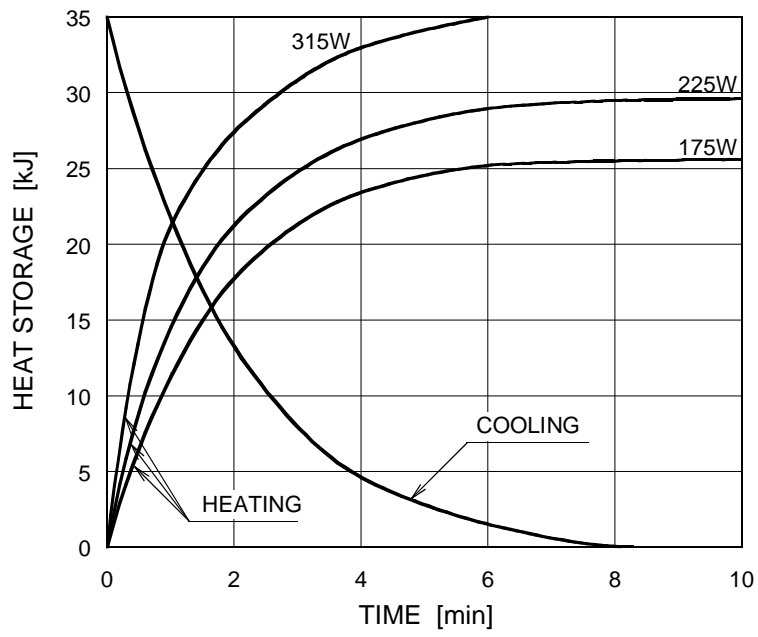
Constant Potential High-Voltage Generator

Nominal Focal Spot Value: 0.6



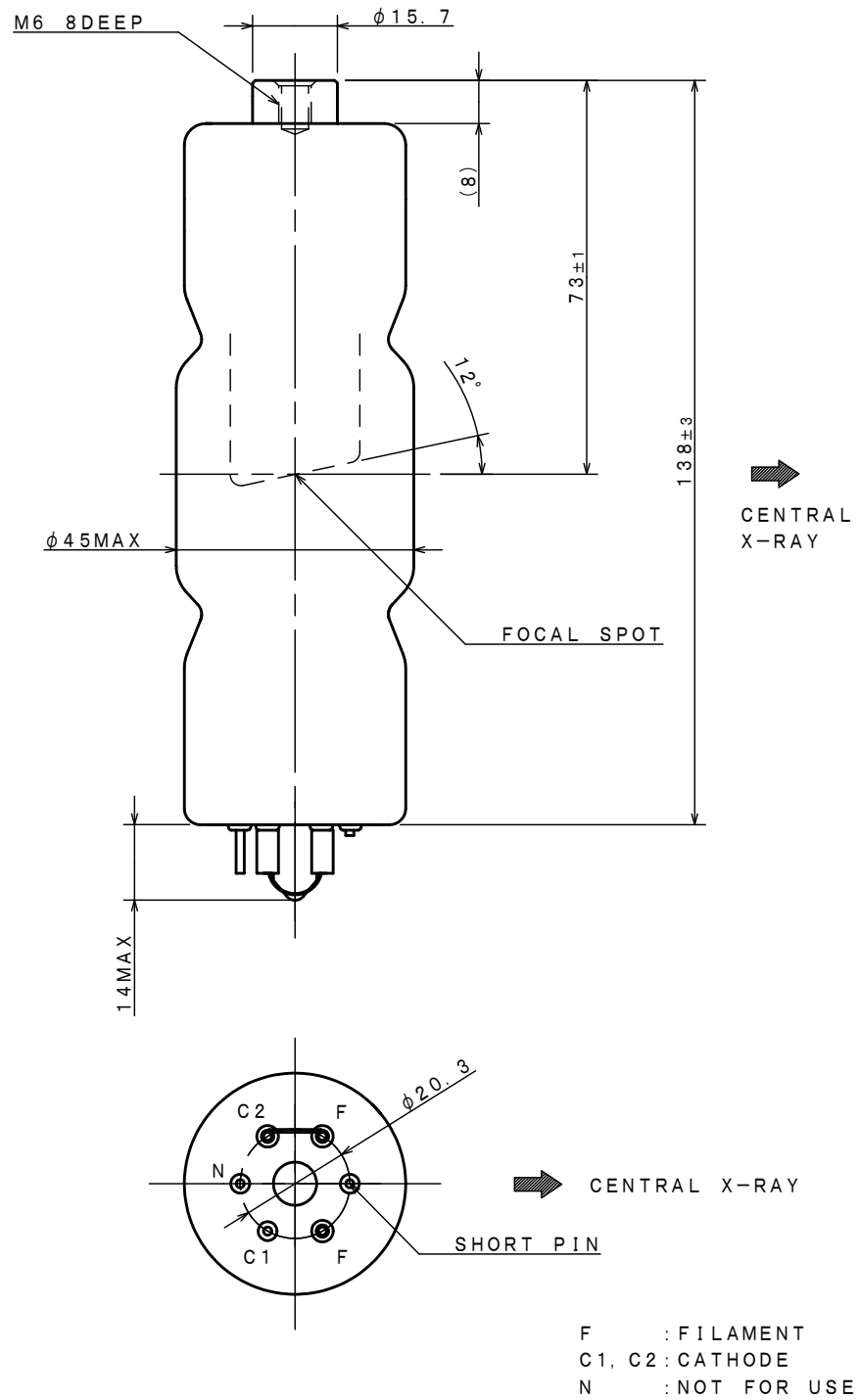
Note: This graph indicates typical characteristics.

Anode Heating / Cooling Curve



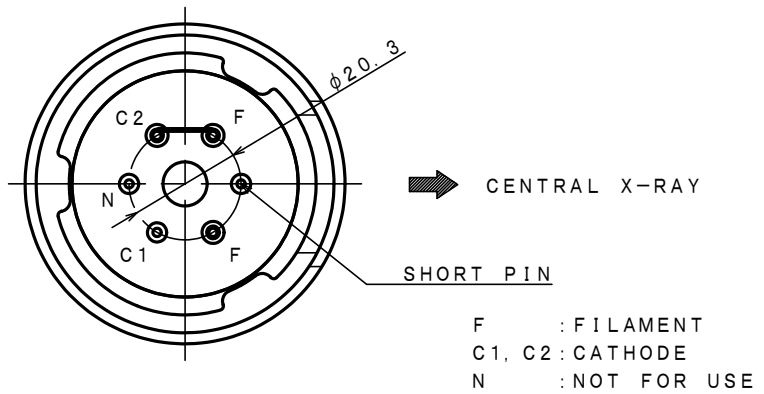
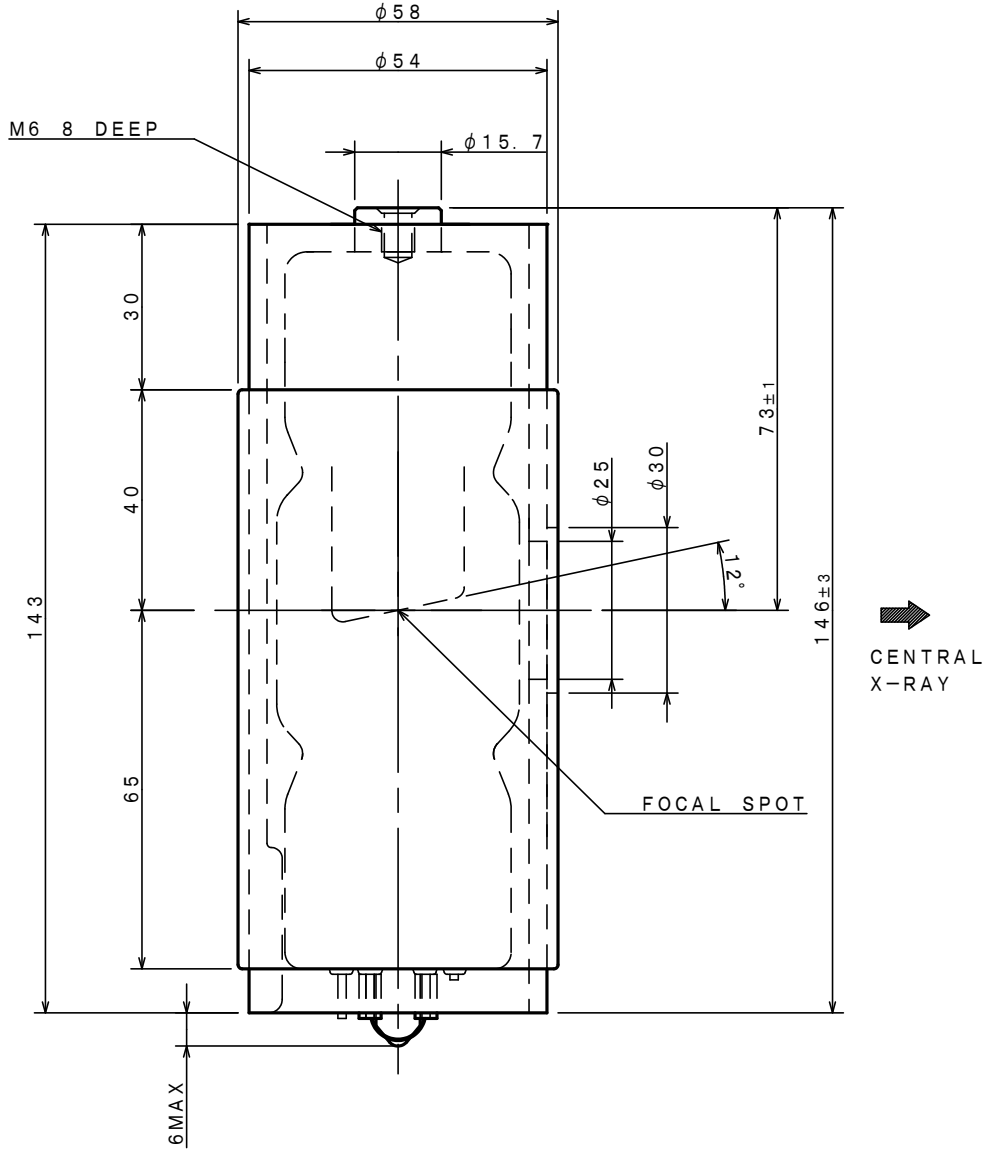
Dimensional Outline of D-067

Unit: mm



Dimensional Outline of D-067SB

Unit: mm



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