

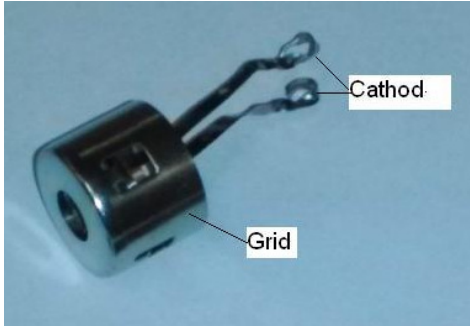
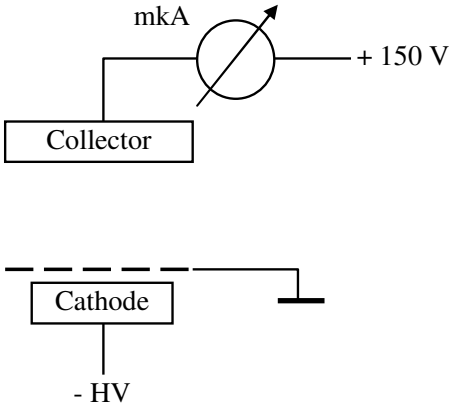
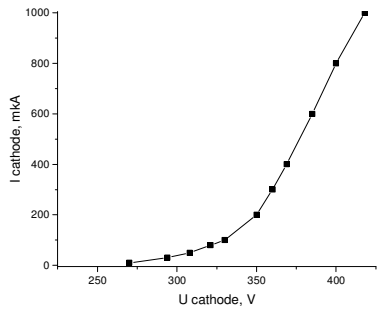
CATHODE ASSEMBLY	Description
Unit number: 111063-04	January 1, 2017
Case diameter	9,4 mm
Package	Plastic containers, which placed into hermetic polyethylene bags filled with nitrogen
Cathode-Grid Gap	45 μ
Grid Transparency	73%
Operating Voltage for 50 μ A	310 V
Fig 1	
	<p>Fig. 1 shows cathode-grid assembly. Case diameter is 9.4 mm. Electrical contacts for assembly: "grid" contact is on the case, cathode contacts (for technological reasons two of them) are in the form of two petals. Contact can be made with one or with two of them.</p>
Fig 2	
	<p>Fig. 2. shows the measurement scheme grid was grounded, and negative voltage was applied on cathode. Since during reload from one chamber to another cathode assembly has contacts with atmosphere, cathode assemble must be trained.</p> <p>Training conditions: The residual pressure should not be worse than in the chamber than 1.0×10^{-6} Torr.</p> <p>In the DC mode, gradually raise the operating current by following steps: 10 μA, 30 μA, 50 μA, 100 μA. At each stage cathode assembly must be trained for about 10 minutes. On the last step (100 μA) duration should be 30 minutes to stabilize the operating voltage for the current of 100 μA. Thereafter, cathode assembly can work with a range close to 50 μA. It is important to remember that the loss of vacuum in the chamber results to rapid aging of the cathode assembly.</p>

Fig 3



Volt-ampere characteristics of cathode assembly 111063-04