RF-4.5 Plasma Source

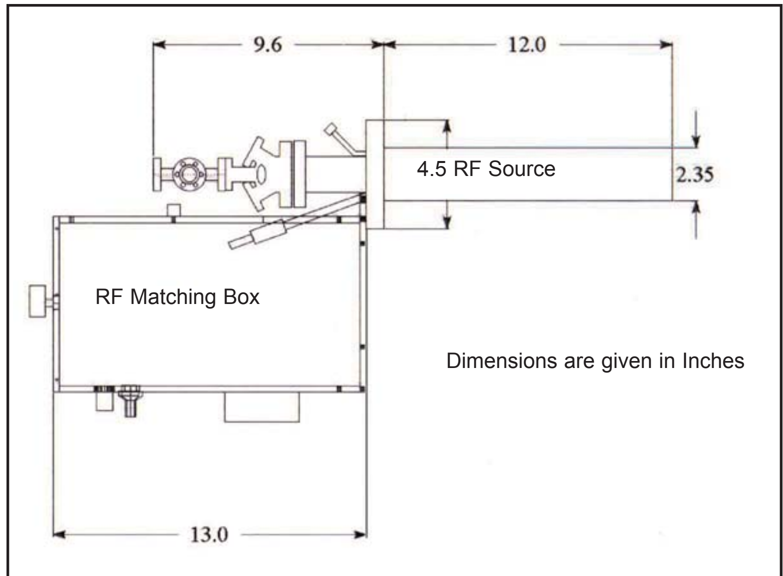
SVTA-RF-4.5

Features

- For N_2, O_2, and H_2
- Growth Rates Up to 4 um/hr
- Optical Port for Plasma Monitoring
- Custom Plasma Chamber and Apertures
- Manual and Automatic Tuning Matching Network
- Charge Suppression
- Cooling Water Safety Interlock

Description

The RF-4.5 plasma source is designed to break the Nitrogen, Oxygen, and Hydrogen bonds to supply sufficient atomic content for high quality growth of nitrides and oxides, as well as cleaning of substrates for thin film deposition. The SVTA-RF-4.53 source can produce growth rates as high as 4 um/hr or better under optimal growth conditions (see Appl. Note 1001). Custom apertures and plasma chambers are available for optimizing deposition processes. The RF sources have a comprehensive range of accessories that can enhance the performance of the plasma.

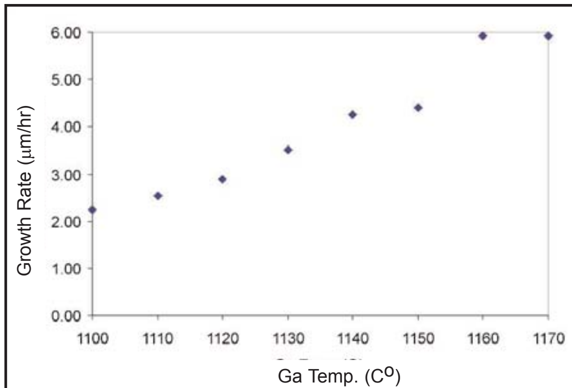


Specifications

RF Power Level.................................200 - 600 Watts
Gas Flow Rate...0.1-5 SCCM
Flange...4.50 ''CF
Source Diameter...2.35''
Water Cooling............................0.17 GPM Flow Rate
RF Matching Network.........................Manually Tuned
Plasma Chamber...................PBN, Alumina or Quartz

Model	Description
SVTA-RF-4.5PBN	PBN, 0.11" Aperture, Specify Length: 12" - 20"
SVTA-RF-4.5ALO	Alumina, 0.11" Aperture, Specify Length: 12" - 20"
SVTA-RF-4.5Q	Quartz Plasma Chamber, 0.11" Dia. Fused Hole
SVTA-RF-4.53	Higher Growth Rate Model

Model	Optional Components
SVTA-RF-4.5-ISM	Add on Integral Shutter Option
SVTA-RF-HVG	HV Energy Control Grids
SVTA-RF-4.5-HVPM	Charge Suppression Plates Upgrade
SVTA-RF-HVPS	High Voltage Supply for Charge Suppression Plates
SVTA-RF-SIL	Cooling Water Flow Safety Interlock
SVTA-RF-OP	Plasma Emission Monitor
RF-FOA	Fiberoptic Flange Adapter
SVTA-RF-V	Variable Leak Valve
SVTA-RF-MFC	Mass Flow Controller



Growth rate of the SVTA-RF-4.53 plasma source
(See Appl. Note 1001)

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