

# RF-2.75 Plasma Source



SVTA-RF-2.75

## Features

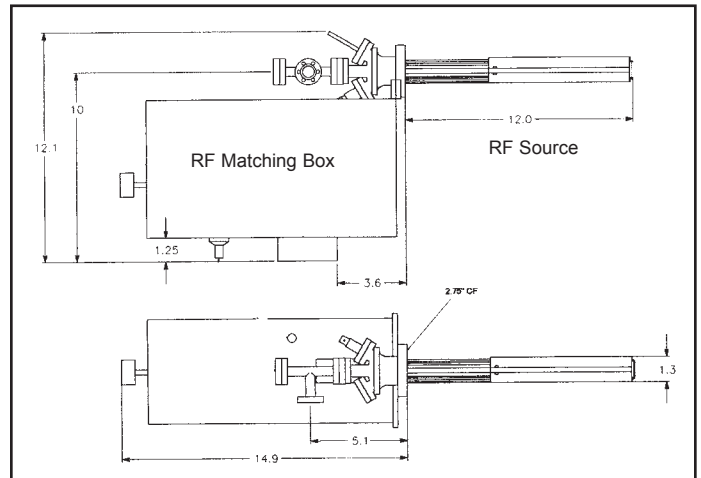
- Compact RF Plasma Source
- Optical Port for Plasma Monitoring
- Integral Water Cooling

## Description

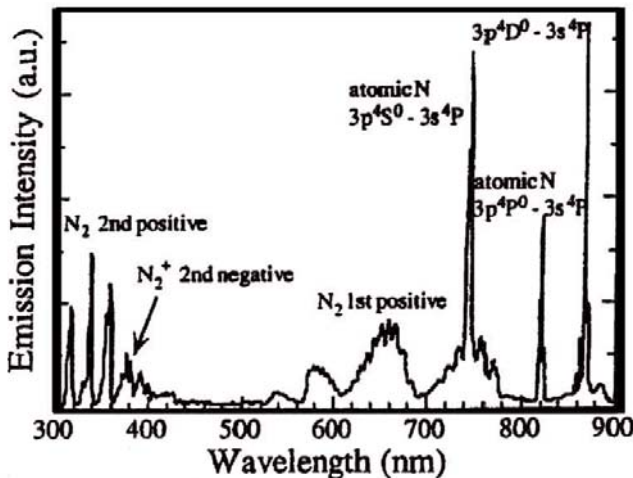
SVT Associates developed a compact RF plasma source for thin film deposition systems. It is designed for fundamental research of nitride and oxide thin film growth. It has a manually tuned RF matching network and mounts on a standard 2.75" CF (70mm) flange. It is equipped with an optical view-port for plasma monitoring, and an integral plasma spark igniter. The SVTA-RF-2.75 plasma source can produce growth rates as high as 0.5  $\mu\text{m/hr}$  or better, and flux uniformities of  $\pm 2\%$  on 2" wafers.

## Specifications

RF Power Level.....150 - 400 Watts  
 Gas Flow Rate.....0.1-5 SCCM  
 Flange.....2.75" CF  
 Source Diameter.....1.30"  
 Water Cooling.....0.17 GPM Flow Rate  
 RF Matching Network.....Manually Tuned  
 Plasma Chamber.....PBN



All Dimensions in Inches



Nitrogen Plasma Emission Spectra of the SVTA-RF-2.75 Plasma Source

Model	Description
SVTA-RF-2.75	PBN, 2.75" CFF
SVTA-RF-2.75-PBN-A-0.11	PBN Aperture, Single 0.11" Hole Dia.
SVTA-RF-2.75-PBN-A-XX	PBN Aperture, Specify Hole Diameter (xx)
SVTA-RF-2.75-PBN-CHS	PBN Plasma Chamber Set
SVTA-RF-2.75-PBN-S	PBN Internal Shield Accessory
SVTA-RF-2.75-Q-A-0.11	Quartz, Single 0.11" Hole Dia

Model	Optional Components
SVTA-RF-OP	Plasma Emission Monitor
RF-FOA	Fiberoptic Flange Adapter
SVTA-RF-V	Variable Leak Valve