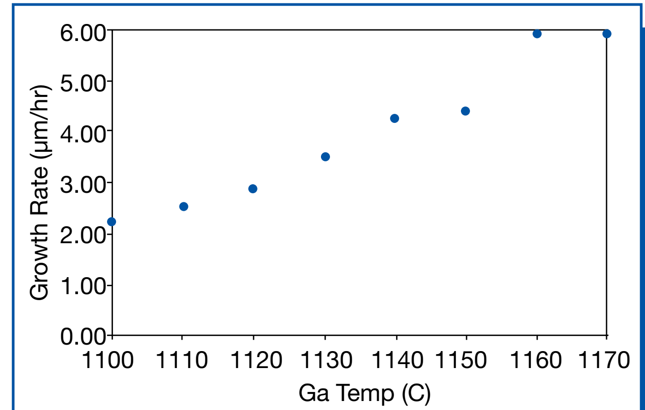
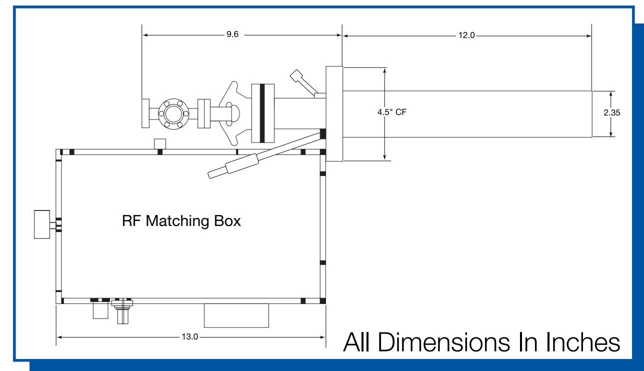
RF-4.5 Plasma Source



GaN Growth rate of SVT Associates RF-4.53 Plasma Source in a SVT Associates III/V MBE System *(See Application Note 1001)*



Description

- SVT Associates RF-4.5 Plasma Source is designed to dissociate diatomic nitrogen, oxygen, and hydrogen without producing high energy ions.
- The “zero” ion content flux allows for high quality growths as well as cleaning of substrates for thin film deposition without damaging the surface.
- SVT Associates RF-4.53 High Growth Rate Plasma Source is able to produce high quality growth rates greater than 4 µm/hr *(See Application Note 1001)*.
- Custom aperture and chamber designs are available upon request to tailor the flux to individual applications.
- Optional equipment such as RoboRF provide automated operation and allow the user to log data, as well as write recipes for reproducible growths.

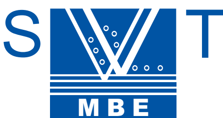
Features

- N_2, O_2, and H_2 Models Available
- Growth Rates Up to 4 µm/hr
- Optical Port for Plasma Monitoring
- Custom Shaped Plasma Chamber and Apertures Available
- Automatic Tuning Network Available

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 Auto Tuning Optional
Plasma Chamber	PBN, Alumina, or Quartz

Models	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" Diameter Fused Hole
SVTA-RF-4.53	High Growth Rate Model



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