

# Hot-Lip Effusion Cell – HL Series

Engines for Thin Film Innovation



## Description

SVT Associates' HL Series is designed for materials that require a higher temperature near the lip of the crucible. The hot-lip source has a primary full length filament that maintains a uniform temperature over the length of the crucible and provides a higher temperature at the lip, preventing condensation of materials such as Ga and In from forming on the crucible lip during evaporation. A single power supply, temperature controller and cable runs the cell. This source is available for mounting on a 2.75" or larger CF flange. As an option, water cooling shrouds and integral shutters require a 4.50" CF Flange or larger.

## Features

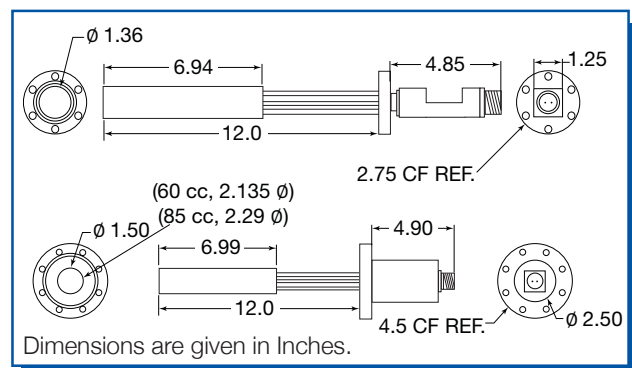
- For III-V MBE System
- "Hot-Lip" Style Filament Design
- Excellent Source for Ga and In
- Wide Range of Sizes Available

## Specifications

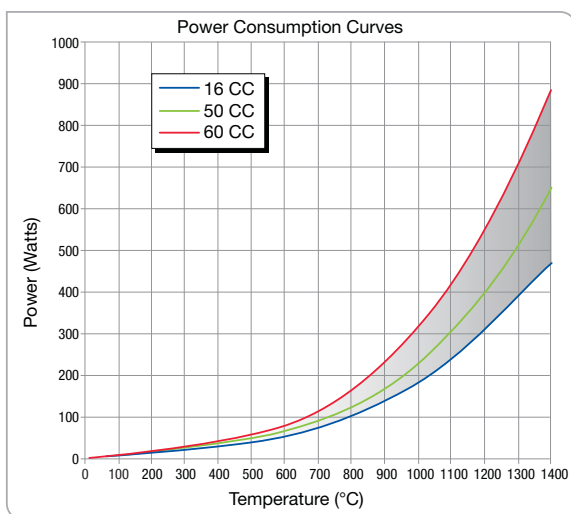
Temperature Range	0 °C – 1,400 °C 1,600 °C Model Available
Power Requirement	600 W or 1kW
Temperature Stability	+/- 0.1 °C
Temperature Reproducibility	0.1 °C
Thermocouple Type	Type C (Type D Available)
Crucible Size	16 cc, 20 cc, 22 cc, 40 cc, 50 cc, 60 cc, 85 cc, 16 cc and 22 cc Crucibles have a tapered wall for best uniformity (PBN Crucible)
Standard Length	*12.0"
Mounting Flange	2.75" or 4.50" OD – CF
Electrical Connectors	Filament: Amphenol Circular

\*Contact SVT Associates for custom in-vacuum lengths.

\*Other crucible materials are available.



Schematic drawing of Hot-Lip Effusion Cells.



Typical power consumption of 16 cc – 60 cc Hot-Lip Effusion Cells.

Model	Flange Size (CFF)	Crucible (cc)
SVTA-HL-16-275	2.75"	16
SVTA-HL-16-450	4.50"	16
SVTA-HL-20-275	2.75"	20
SVTA-HL-20-450	4.50"	20
SVTA-HL-22-275	2.75"	22
SVTA-HL-22-450	4.50"	22
SVTA-HL-40-275	2.75"	40
SVTA-HL-40-450	4.50"	40
SVTA-HL-50-450	4.50"	50
SVTA-HL-60-450	4.50"	60
SVTA-HL-85-450	4.50"	85

