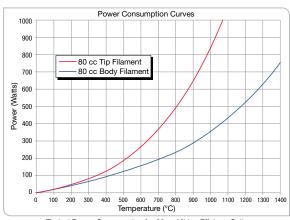
Viking Effusion Cell - V Series

Engines for Thin Film Innovation



Viking Cell Gallium Flux Level During Shutter Actuation at 970 °C 9 —— Flux Monitor Signal (a. u.) 8 7 6 5 Shutter Open 4 3 2 1 0.5 Seconds 0 Time(s)

The Viking Effusion Cell eliminates flux instabilities found in other effusion cells caused by shutter operation.



Typical Power Consumption for 80 cc Viking Effuison Cell.



Description

The Viking Effusion Cell is designed for highest growth quality of III/V compounds of Ga and In. The proprietary design maximizes capacity, while increasing uniformity and long term flux stability. The Viking is ideal for application with abrupt interfaces and long growth campaigns. The design eliminates shutter transient and "spitting" experienced with other effusion cells. With a fully enclosed filament, the Viking is compatible with corrosive environments such as ammonia and oxygen backgrounds. The innovative material specific, shaped crucibles provide the highest flux stability, while remaining simple to load material.

Features

- Excellent Source for Ga and In
- Two Independent Filaments for Complete Temperature Control
- "Zero" Flux Transient
- Designed for Corrosive Environments
- Long-term Flux Stability

Specifications	
Temperature Range	0 °C – 1,400 °C
Power Requirement	600 W or 1kW
Temperature Stability	+/- 0.1 °C
Temperature Reproducibility	+/- 0.1 °C
Thermocouple Type	Type C (Type D Available)
Crucible Sizes*	40 cc, 60 cc, 80 cc, 120 cc
Materials*	PBN and Aluminum Oxide
Standard Length*	12.0"
Mounting Flange	4.50" or larger CF Flange
Electrical Connectors	Filament: Amphenol Circular T/C: Omega Subminiature

*Other sizes, materials, and lengths are available, contact SVT Associates for details.

SVTA-V-(Crucible Size)-(Flange Size)		
Flange Size	4.50"	
Crucible Size	20 cc	
	22 cc	
	40 cc	
	50 cc	
	60 cc	
	80 cc	
	120 cc	