

# Downstream Plasma Applicator, WR284

GERLING

## Model GA6102

The GA6102 Downstream Plasma Applicator was designed as general purpose tool for plasma process development. It features a quartz plasma tube fitted between standard stainless steel vacuum fittings which are easily disassembled for tube replacement. Standard Swagelok® fittings are provided for water cooling as well as waveguide perforations for viewing and/or additional forced air cooling of the plasma tube.

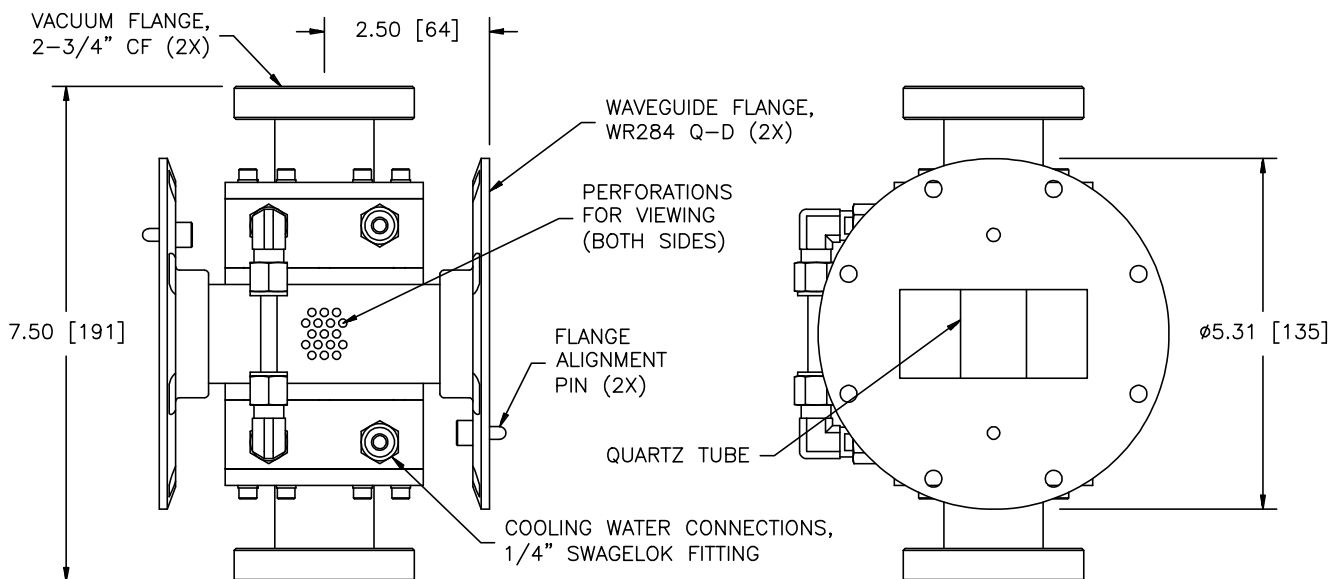
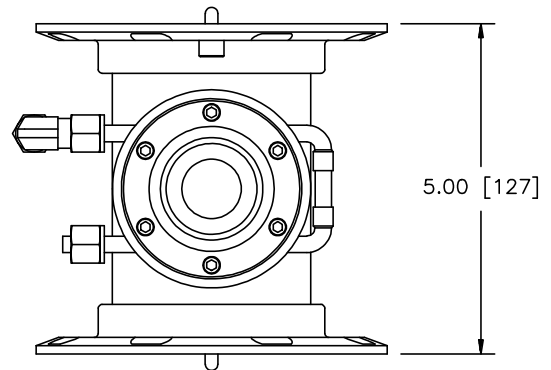
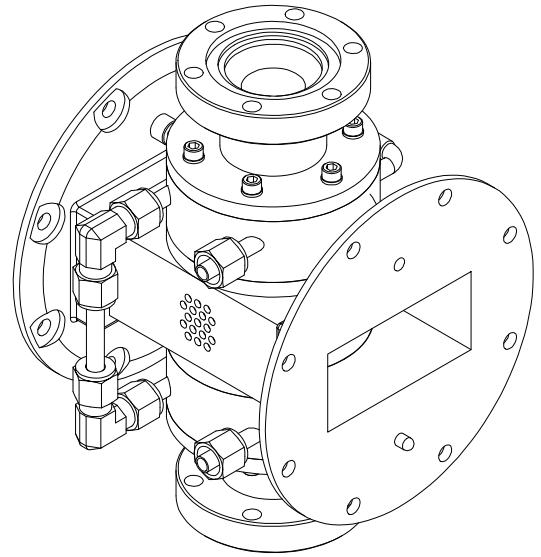
To facilitate process development for different gas recipes, the waveguide is designed with flanges at both ends. This allows connection to a sliding short circuit (such as model GA1205) which helps to optimize microwave coupling as the load impedance varies with gas recipe. For basic installations a fixed position short can be installed in place of the sliding short circuit. A popular feature for laboratory applications is the quick-connect waveguide flange which allows rapid assembly and disassembly of adjacent waveguide components using single screw clamps (model GA8410).

### General Specifications:

Waveguide	WR284
Flanges	UG-584/U with taper
Frequency	2450 MHz nominal
Input Power	1.5 kW continuous max. (process dependent and may require additional cooling)
Vacuum Flanges	2-3/4" Conflat®, Type 304 stainless steel
O-rings	Parker Parofluor®
Water Fittings	Stainless steel Swagelok® 1/4" nuts and ferrules; Copper tubing and channels
Construction	Dip brazed aluminum waveguide
Finish	Chemical film; Black textured paint

### Options:

- ◆ Alternate vacuum flange styles
- ◆ Integrated waveguide termination (fixed or sliding)
- ◆ Flange interlock switches



GERLING APPLIED  
ENGINEERING, INC.

© 2006 Gerling Applied Engineering, Inc.  
PO Box 580816 • Modesto, CA 95358 • USA  
Phone: +1-209-527-8960 • Fax: +1-209-527-5385  
E-mail: sales@2450MHz.com • Web: www.2450MHz.com