

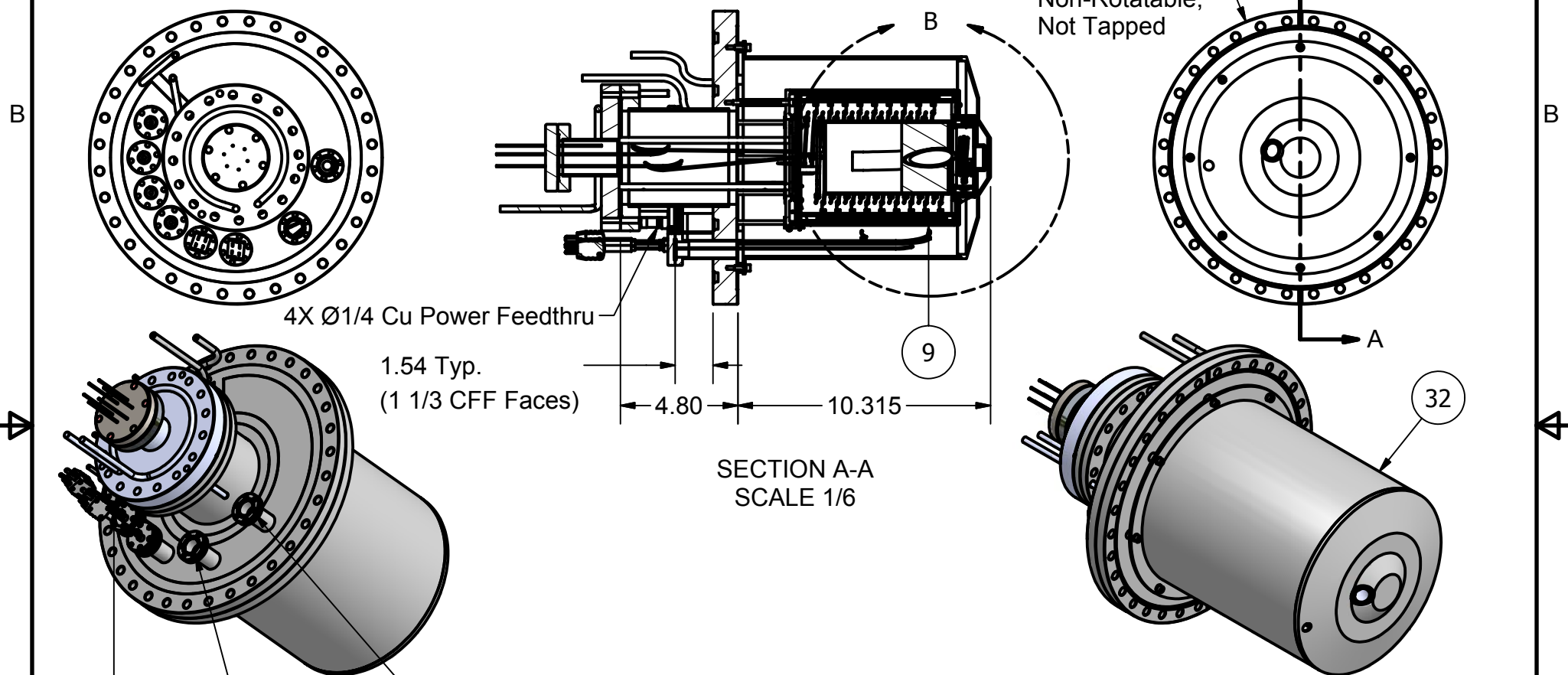


PARTS LIST

| ITEM | QTY | Part # | DESCRIPTION |
|------|-----|--------|-----------------------------------|
| 9 | 1 | 105615 | 2 Zone 1000°C UHV Heater Assembly |
| 32 | 1 | 105683 | 12 CFF & Outer Housing Assembly |

REVISION HISTORY

| REV | DESCRIPTION | DATE | APPROVE |
|-----|---------------------------------|---------|---------|
| A | Reduced OD from 8.500 to 8.250. | 12/2/09 | MC |



4X Ø1/4 Cu Power Feedthru

1.54 Typ.
(1 1/3 CFF Faces)

4.80 10.315

SECTION A-A
SCALE 1/6

12 CFF,
Non-Rotatable,
Not Tapped

1 1/3 CFF for
Shutter Mount

Spare 1 1/3 CFF

4X Type K Thermocouple,
Inconel Sheathed, Ø1/16
x 18" Long, Not Grounded

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| | |
|------------------|-----------|
| DRAWN mcurtis | 9/15/2009 |
| CHECKED | |
| QA | |
| MFG | |
| APPROVED | |
| Material: | |
| - | |

HeatWave Labs, Inc.
 195 Aviation Way, Suite 100 P: 831-722-9081
 Watsonville, CA 95076 F: 831-722-5491
 www.cathode.com

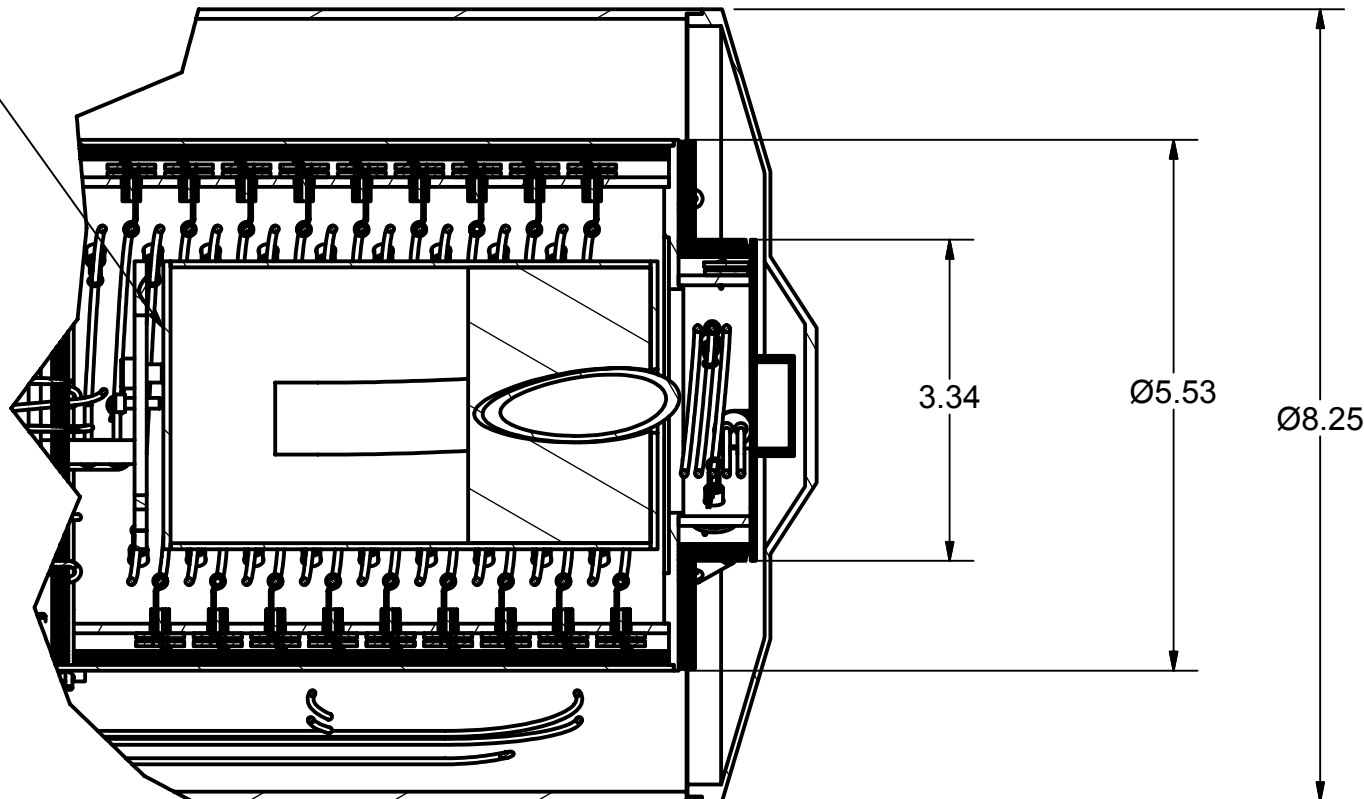
Two Zone UHV Heater Assembly

| | | | |
|--------------|---------------------|------------------|----------|
| SIZE A | Cage Code: 1YAN4 | DWG NO 105558 | REV A |
| SCALE 1/6 | SHEET 1 OF 2 | | |





Customer Supplied
Crucible Assembly



DETAIL B
SCALE 1 / 2

Notes:

- 1. Estimated operation:
- Crucible Zone (filament temperature):

 - 20.5V, 27A @ 800°C (553W)
 - 27.2V, 32A @ 1000°C (870W)
 - 39.9V, 39A @ 1200°C (1556W)

- Nozzle Zone (filament temperature):

 - 2.3V, 27A @ 800°C (62W)
 - 2.9V, 32A @ 1000°C (93W)
 - 4.4V, 39A @ 1200°C (171W)

2. All internal threaded hardware is vented.

| | |
|------------------|-----------|
| DRAWN mcurtis | 9/15/2009 |
| CHECKED | |
| QA | |
| MFG | |
| APPROVED | |

| | | | |
|----------------------------|------------------|---|--|
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| | | Two Zone UHV Heater Assembly | |
| SIZE A | DWG NO 105558 | REV A | |
| SCALE | | SHEET 2 OF 2 | |

B

B

A

A

