

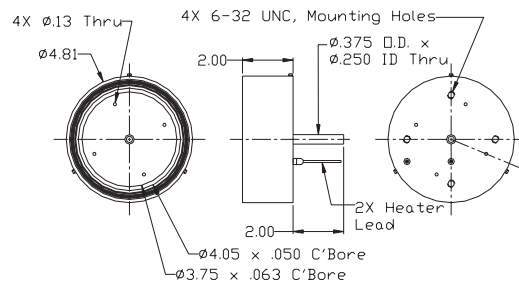
Model 101511 O₂ Substrate Heater

- 1000°C O₂ operation
- 1200°C operation with Precious metal heating element (with #101446 shield/mount)
- Up to Ø2" Substrate
- Exposed element for maximum sample temperature
- Available also with shield housing, #101446 with sample holder and hold down clips, #101479
- TC access to substrate
- See Model 101303-03 controller/power supply for programmable control



Model 101710 and 101769 Oxidizing Atmosphere Ø4.0" and Ø6.0" Wafer Heaters

- 850°C operation
- 1200°C with optional precious metal element, allows UHV/O₂ operation
- Complete side and rear shielding
- Thermocouple access to substrate
- Available in other sizes
- Available with optional push pin guides as pictured
- See Model 101303-04 controller/power supply for programmable control



Dimensions typical for Ø4.0" Heater



Shown with optional sample window

Model 101446 O₂ Heater With Sample Holder

- 1000°C in O₂ Operation
- 1200°C with Optional Precious Metal Element
- Up to Ø2" substrate
- Complete side and rear shield
- Uses #101511 heater assembly
- TC access to substrate
- #101479 sample clips available separately also
- See Model 101303 controller/power supply for programmable control
- See 101868 for 1200°C UHV heater option



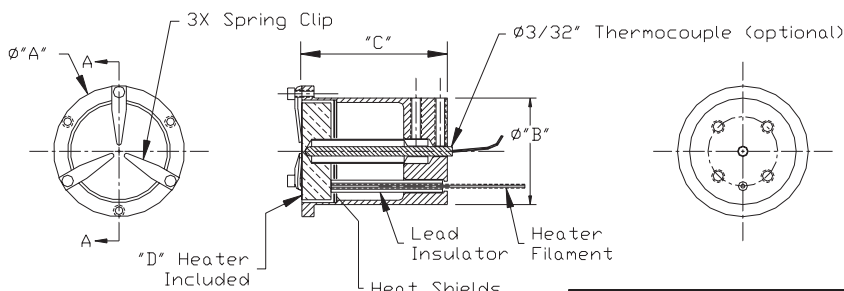
Shown without top heat shield



Model #101491-02, O₂



Model #101491-01, UHV



View A-A

| 101491-02 | | |
|-----------|------|-----------|
| V | I | T, deg. C |
| 9.2 | 6.0 | 500 |
| 14.5 | 8.0 | 800 |
| 18.5 | 9.1 | 1000 |
| 23.0 | 10.5 | 1200 |

Model 101491 UHV/O₂ Heater With Sample Clips

- 850-1200°C in O₂ Operation, 1200°C in UHV
- Up to Ø1" substrate
- Complete side and rear heat shield
- Thermocouple (optional) access from rear to within .05" of substrate
- #101479 sample clips also available separately
- See Model 101303 controller/power supply for programmable control
- See Accessories section for purchasing sample holding clips (part #101479) individually

| Dash # | Operating Atmosphere | Maximum Temperature | Heater Diameter | "A" | "B" | "C" | "D" |
|--------|----------------------|---------------------|-----------------|--------|--------|--------|-----------|
| -01 | UHV | 1200 deg.C | | | | | 101138 |
| -02 | UHV/O ₂ | 1200 deg.C | 1.00 | 1.35 | 1.10 | 1.50 | 101275-22 |
| -03 | O ₂ | 850 deg.C | | | | | 101275-27 |
| -04 | UHV | 1200 deg.C | | | | | 101137 |
| -05 | UHV/O ₂ | 1200 deg.C | 0.50 | 0.85 | 0.57 | 0.75 | 101275-21 |
| -06 | O ₂ | 850 deg.C | | | | | 101275-28 |
| -07 | UHV | 1200 deg.C | | | | | 101136 |
| -08 | UHV/O ₂ | 1200 deg.C | 0.32 | Custom | Custom | Custom | 101275-26 |
| -09 | O ₂ | 850 deg.C | | | | | 101275-29 |