**Max. Working Temperature of Heating Elements of Tungsten , Tantalum, Molybdenum Under Various Processing Gases**

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| **Processing Gas @ 2 PSIG, <10°C /min.** | **Tungsten****W** | **Tantalum****Ta** | **Molybdenum****Mo** |
| Air | 300°C | 300°C | 300°C |
| Argon---Ar | 3000°C | 2500°C | 1650°C |
| Hydrogen--H2 | 3000°C | 3000°C | 1650°C |
| Forming — 5%H2, 95%N2 | 2300°C | 700°C | 1650°C |
| Carbon Monoxide — CO | 800°C | 1000°C | 1400°C |
| Anhydrous Ammonia — NH3 | 3000°C | 400°C | 1100°C |
| Carbon Dioxide — CO2 | 900°C | 1200°C | 1200°C |
| Nitrogen — N2 | 2300°C | 700°C | 1650°C |
| Helium — He | 3000°C | 2500°C | 1650°C |
| Methane — CH4 | 3000°C | 800°C | 1100°C |
| Fluorine — F2 | N/R | N/R | N/R |
| Vacuum | 2500°C | 2200°C | 1650°C |
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