



Quartz Infrared Halogen Lamps

High Power Energy Sources for the Semiconductor Industry and Beyond

Rhenium Alloys manufactures tubular double-ended (T-Style) infrared (IR) **Quartz Halogen Lamps**.

Our lamps are qualified and approved by leading semiconductor manufacturers worldwide.

Rhenium Alloys is the OEM supplier to ASM for their Epsilon and Polygon epitaxial reactors.

Our proprietary process ensures minimal filament sag, thereby ensuring long life.

Rhenium Alloys' quartz halogen lamps convert approximately 90% input energy into IR radiant heat. In combination with reflectors, the infrared energy can be evenly distributed and optimum temperatures are achieved.

Rhenium Alloys' Lamps deliver **Rapid Thermal Response** full emitted power within 100 milliseconds.

In addition to those for the semiconductor industry, Rhenium Alloys supplies many other halogen IR lamps. We have the capability and expertise to manufacture to customer specifications for new equipment builds and/or any specialty lamp needs.



Quality Control throughout every step of the manufacturing process ensures our superior product.

Features & Benefits

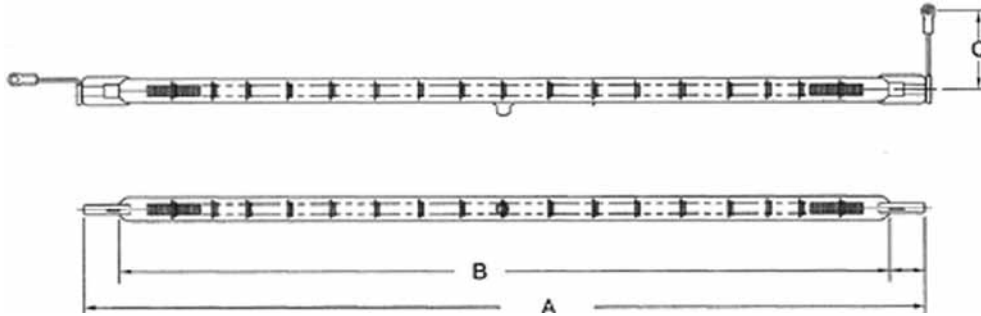
- Delivers Rapid Thermal Response.
- Converts 90% electrical input into IR radiant heat.
- High Quality Standards produce superior long lasting lamps.

Additional Benefits of Rhenium Quartz Infrared Halogen Lamps

Quartz lamps are high-temperature heat sources with potentially high-radiant energy concentration – when lamps are installed close together – deliver maximum power density of equipment and process time. High temperature in a very short time on the wafer and short process cycle.

Equipment Applications

- CVD Chemical Vapor Deposit
- Polysilicon Deposition
- Epitaxy
- RTP Rapid Thermal Process
- Oxidation
- Ion Implant Annealing



Part Numbers	Reactor Type	Wattage	Voltage	Color Temp.	Dim A	Dim B	Dim C
382.1614314301.3*	ASM Epsilon & Polygon	10000	480	3150K	17.6"	16.5"	1.5"
382.16321908CO1.3**	ASM E2000 Product Line	6000	480	3150K	13.5"	12.25"	1.25"
382.10648025HTP.3***	ASM	6000	480	3150K	13.5"	12.25"	1.25"
382.CHA.3	CHA	1200	144	3000K	8.625"	7.35"	2"
382.1700185	IBIS	4000	480	3150K	11.63"	10.25"	NA
382.6K13480V125A.3	Applied	6000	480	3150K	11.63"	10.25"	1.25"

* 300mm10K licensed through ASM only | ** Standard 6K 17 Support | *** New Long Life 6K 25 Support

Handling Instructions

- Avoid touching Quartz Halogen Lamp with bare hands. Salts and oils on hands can cause devitrification, which can break down the quartz body and reduce lamp performance.
- If the quartz body is contaminated, clean with lint-free cloth and alcohol.
- Since lamp temperatures exceed 600 degrees, do not handle lamps until after they have cooled. Burns at these temperatures can be severe.