

Infra-Red Lamps

Features

- **Collimated beam** reduces or eliminates the requirement for external optics
- **Hermetically sealed source** for longer life
- **Internal reflector** for increased power output
- **Ceramic lamp body** allows for higher filament temperatures and more robust operation
- **Application specific window materials** are available to meet specified OEM requirements
- **ISO 9001: 2000 Certified**

Applications

- IR Gas Analysis
- FTIR Spectroscopy
- IR Communications
- Calibration Sources

The MAXIR® is a broad band infra-red filament source with an integral reflector specifically designed for maximum output throughout the IR region. Materials for the new ceramic body design were chosen such that higher filament temperatures could be achieved without excessive heat losses through the lamp body, allowing for more efficient and robust operation.

The MAXIR® is presently available with Sapphire or Zinc Selenide windows, for useable wavelength ranges from 0.43 to 14 microns, depending on the selected window material. Customized reflector shapes and window materials are also available for application specific requirements.

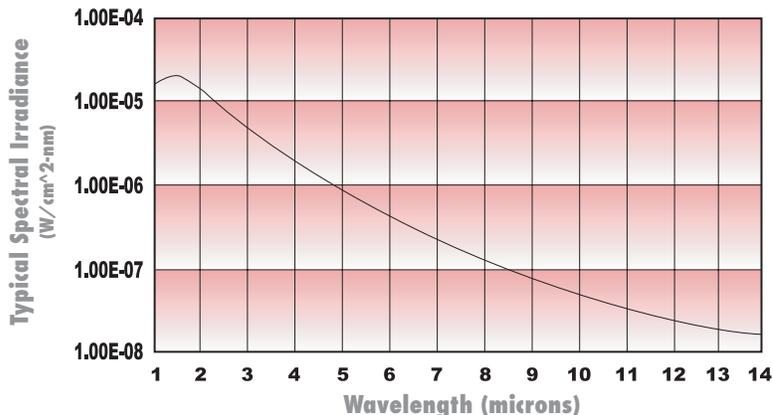
The lamps are operated from a DC power supply designed and manufactured by BHK exclusively for this application. In order to optimize lamp life and allow operation at user-defined set points, the MAXIR® power supply incorporates constant current operation with a ramping function for “soft” startup and shutdown.



MAXIR® Infra-Red Lamps

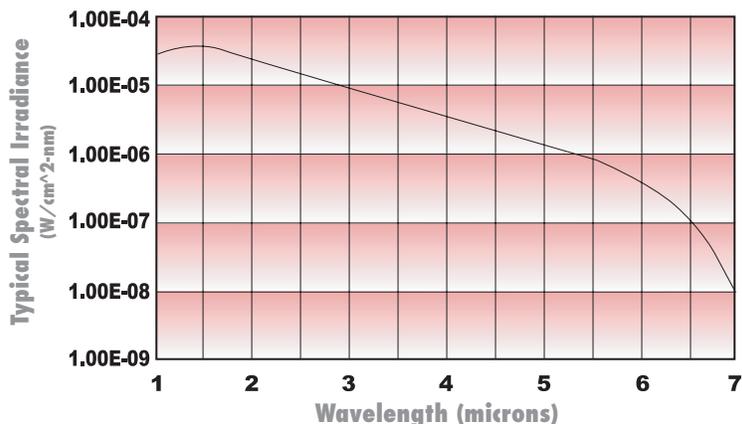
Typical Axial, Zinc/Selenide, MAXIR Spectrum @ 2000 C

(Input Power=4.8 W @ 1.55 ADC: Summed Irradiance @ 20cm = 32.0 mW/cm²)



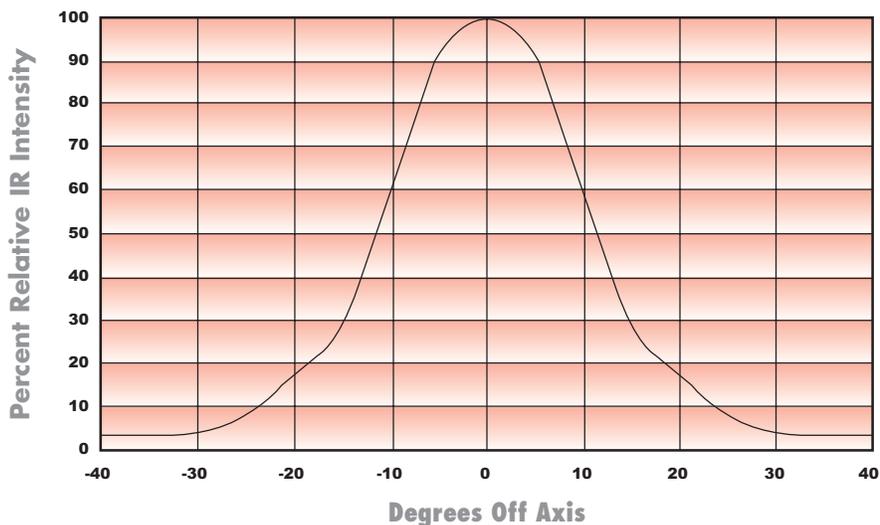
Typical Axial, Sapphire, MAXIR Spectrum @ 2000 C

(Input Power=4.8 W @ 1.55 ADC: Summed Irradiance @ 20cm = 54.0 mW/cm²)



Typical Axial MAXIR Beam Pattern

(Detector 5" from Window)



MAXIR Performance Data

	Window Material	Filament temp (C)	Filament Current (Amps DC)	Power Input (Watts DC)	Summed* Irradiance (mW/cm ²)
1-6 microns	Sapphire	1000	0.77	0.53	1.4
	Sapphire	1500	1.06	1.6	12.0
	Sapphire	2000	1.55	4.8	54.0
1-14 microns	Zn/Se	1000	0.77	0.53	0.69
	Zn/Se	1500	1.06	1.6	7.4
	Zn/Se	2000	1.55	4.8	32.0

*All irradiance measurements made on axis, 20cm from window

WARRANTY

1 yr or 5000 Hours Parts & Labor



More Than A Lamp Manufacturer

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