



"Out Shines All Others"

## STEADY STATE IR SOURCE Model EK-537X

HelioWorks, Inc. offers a unique steady state black body infrared emitter in an industry standard TO-5 package with approximately 2.4 Watts input power at up to 900°C (1173°K). Window options (X) include: 0 = no window, 1 = sapphire, 2 = Calcium Fluoride (CaF<sub>2</sub>)

### Key features include:

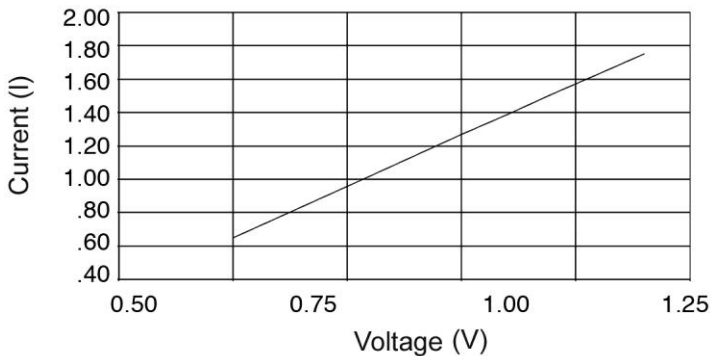
- Kanthal Filament with Emissivity = 0.7
- Approximately 2.4 Watts input at 900°C (1173°K)
- Internal Gold Plated Parabolic Reflector
- Industry Standard TO-5 Package
- Window Options (X) include:
  - 0 = No Window
  - 1 = Sapphire
  - 2 = Calcium Fluoride (CaF<sub>2</sub>)



### Electrical Specifications:

Peak Voltage = 1.4 Volts MAXIMUM  
Peak Current = 1.75 Amps  
Peak Power = 2.45 Watts

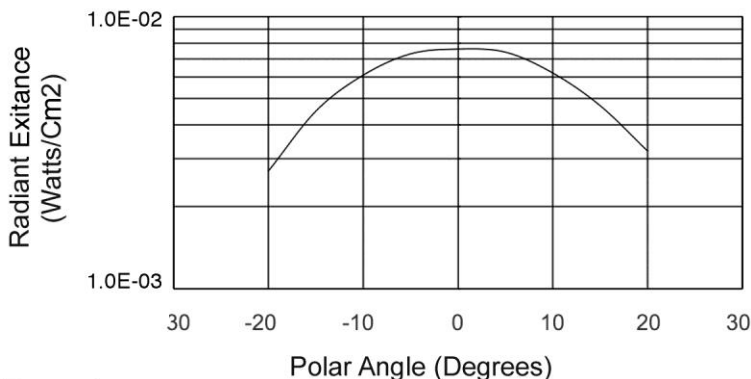
### Current vs Voltage



| Volts | I(Amps) | V*I (W) | V/I (Ohms) |
|-------|---------|---------|------------|
| 0.50  | 0.65    | 0.32    | 0.77       |
| 0.80  | 1.02    | 0.82    | 0.78       |
| 1.00  | 1.27    | 1.27    | 0.79       |
| 1.10  | 1.39    | 1.53    | 0.79       |
| 1.20  | 1.51    | 1.81    | 0.79       |
| 1.30  | 1.63    | 2.12    | 0.80       |
| 1.40  | 1.75    | 2.45    | 0.80       |

### Radiant Exitance (Watts/Cm<sup>2</sup>):

Volts = 1.40, Distance = 3.0 inches from source



| Polar Angle | Average (W/Cm <sup>2</sup> ) |
|-------------|------------------------------|
| -20         | 2.70E-03                     |
| -15         | 4.50E-03                     |
| -10         | 6.10E-03                     |
| -5          | 7.30E-03                     |
| 0           | 7.60E-03                     |
| 5           | 7.40E-03                     |
| 10          | 6.20E-03                     |
| 15          | 4.70E-03                     |
| 20          | 3.20E-03                     |