



HELIOWORKS
"Out Shines All Others"
STEADY STATE IR SOURCE
Model EK-8521

Helioworks, Inc. offers a unique steady state black body infrared emitter in an industry standard TO-8 package that operates at up to 950° Centigrade. A Sapphire window provides spectral transmission to over 5 microns.

Key Features include:

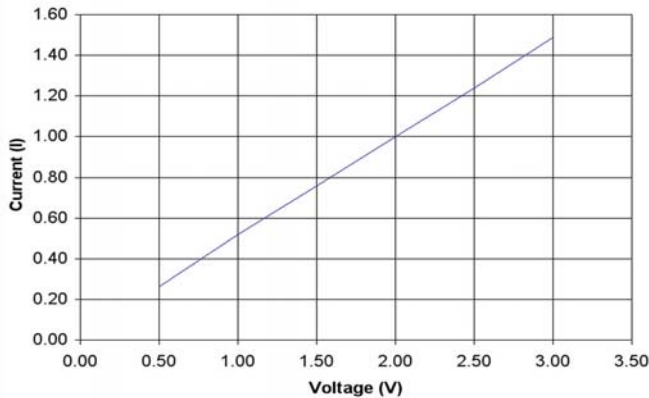
- Kanthal filament with emissivity, $\epsilon = 0.7$
- Sapphire window
- Internal gold plated parabolic reflector
- Standard TO-8 package
- Inert gas backfill



Electrical Specifications:

Peak Voltage = 3.0 Volts DC MAXIMUM
 Peak Current 1.48 Amps
 Peak Power = 4.4 Watts

Current vs. Voltage

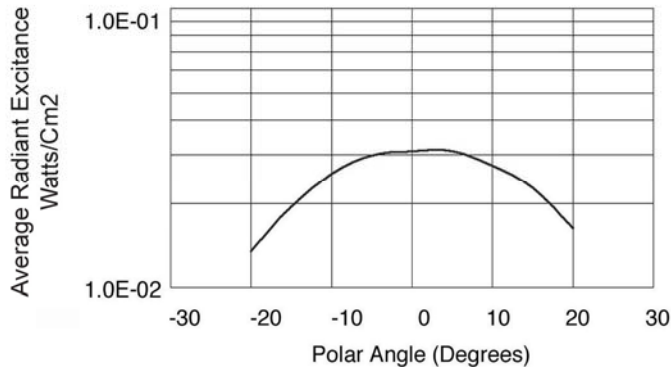


| V | I | W=VI | R=V/I |
|------|------|------|-------|
| 0.50 | 0.26 | 0.13 | 1.90 |
| 1.00 | 0.52 | 0.52 | 1.92 |
| 1.50 | 0.76 | 1.14 | 1.97 |
| 2.00 | 1.00 | 2.00 | 2.00 |
| 2.50 | 1.24 | 3.10 | 2.02 |
| 2.80 | 1.39 | 3.89 | 2.01 |
| 3.00 | 1.49 | 4.47 | 2.01 |

Approximate 950° C

Average Radiant Excitance (Watts/Cm2):

Volts = 3.0, Distance = 3.0 inches from source



| Polar Angle | Average Radiant Excitance (Watts/Cm2) |
|-------------|---------------------------------------|
| -20 | 1.35E-02 |
| -15 | 1.95E-02 |
| -10 | 2.58E-02 |
| -5 | 2.98E-02 |
| 0 | 3.10E-02 |
| 5 | 3.09E-02 |
| 10 | 2.75E-02 |
| 15 | 2.28E-02 |
| 20 | 1.63E-02 |