

### AEI Mount Electron Sources

- High quality / precision cleaned
- Fully annealed / strain free
- Exceptional stability
- Special wire / shock resistant
- Pre-fired / inspected
- International standard AEI mount
- Non-standard mounting available
- New packaging / individually secured
- Filaments visible in unopened box

Cathode heating current range: 2.5A-2.8A

Cathode loading: 1.0A/cm<sup>2</sup>

(Higher loadings will result in reduced lifetime)

Emission area: Elliptical: 50 x 100 μm, 5 x 10<sup>-5</sup>cm<sup>2</sup>

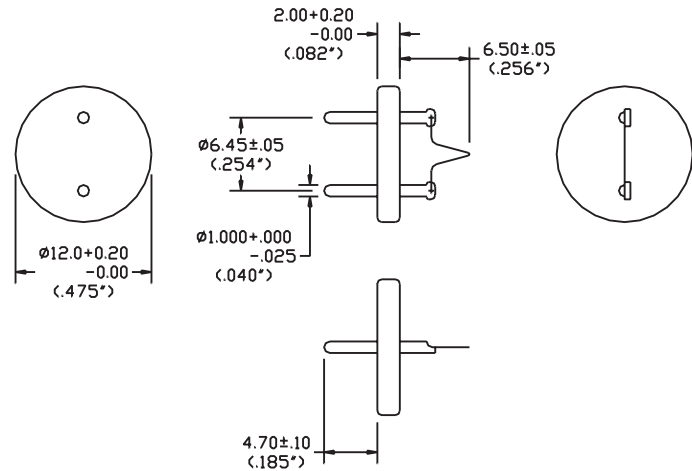
Operating temperature: Approximately 2700°K

Energy Spread: Approximately 0.7 eV

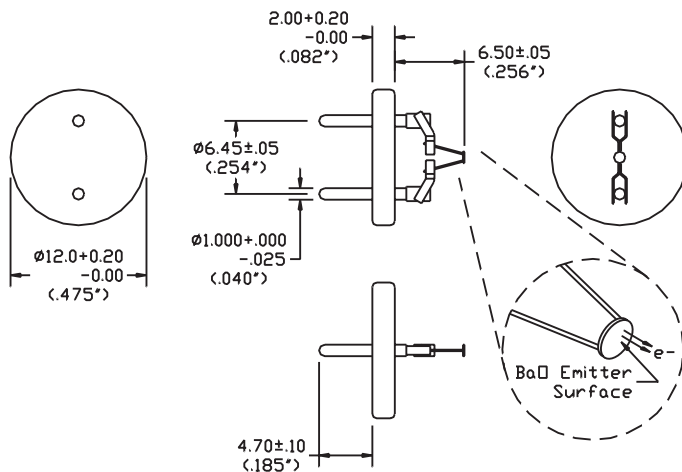
Lifetime: 100 hours at medium currents

Recommended Power supply capability: 2V, 3A

#### Model HWES 101262 Tungsten Filament Source



#### Model HWES 101263 Barium Oxide Electron Source



- Oxide planar cathode
- Low light / low temperature
- Not harmed by repeated exposure to atmosphere when cold
- Good stability
- Low energy spread
- International standard AEI mount
- Non-standard mounting available

Cathode heating current range: 1.0A-1.2A

Cathode loading: 1.0A/cm<sup>2</sup>

(Higher loadings will result in reduced lifetime)

Emission area: Circular: Ø840 μm, 5.52 x 10<sup>-3</sup>cm<sup>2</sup>

Operating temperature: Approximately 1200°K

Energy Spread: Approximately 0.3 eV

Lifetime: About 1000 hours at medium currents

Recommended Power supply capability: 2V, 2A

Suggested storage: dry environment (closed container, with desiccant)

- Refractory metal planar cathode
- Not harmed by repeated exposure to atmosphere when cold
- Exceptional stability
- Low energy spread
- Accurately pre-aligned
- International standard AEI mount
- Non-standard mounting available



Cathode heating current range:

1.4A-1.8A

Cathode loading: 0.05A/cm<sup>2</sup>

(Higher loadings will result in reduced lifetime)

Emission area: Circular: Ø840 μm, 5.52 x 10<sup>-3</sup>cm<sup>2</sup>

Operating temperature: Approximately 2500°K

Energy Spread: Approximately 0.6 eV

Lifetime: 100's of hours with medium currents

Recommended Power supply capability: 2V, 2A

#### Model HWES 101264 Tantalum Electron Source

