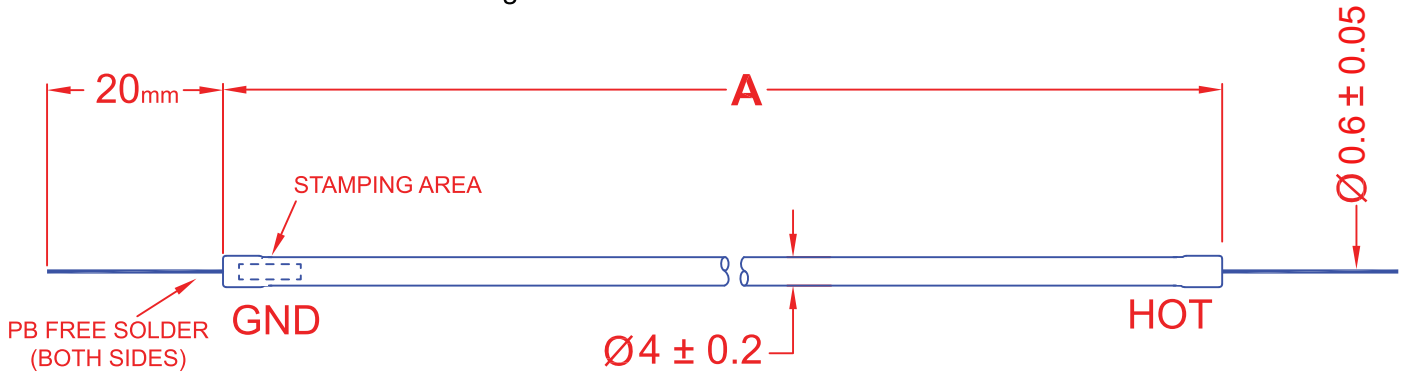


### FEATURES:

- 4mm Diameter
- 3 Length Options
  - 2.75" (70mm)
  - 5.90" (150mm)
  - 9.44" (240mm)
- 254 nm Germicidal Wavelength



| JKL Part Number | Dimension A | Peak Wavelength     |
|-----------------|-------------|---------------------|
| BF470-UVC       | 70 mm       | 254 nm - Germicidal |
| BF4150-UVC      | 150 mm      | 254 nm - Germicidal |
| BF4240-UVC      | 240 mm      | 254 nm - Germicidal |

### ABSOLUTE MAXIMUM RATINGS

| ITEMS                   | STANDARDS    |        |         |
|-------------------------|--------------|--------|---------|
|                         | MIN          | TYP    | MAX     |
| Operational Temperature | 0 °C         | -      | 60 °C   |
| Operation Humidity      | 5% Rh        | -      | 95% Rh  |
| Storage Temperature     | - 30 °C      | -      | 85 °C   |
| Storage Humidity        | 5% Rh        | -      | 95% Rh  |
| Operation Lamp Current  | 70 mm        | 2 mA   | 10 mA   |
|                         | 150mm, 240mm | 2 mA   | 15 mA   |
| Operation Frequency     |              | 30 kHz | 55 kHz  |
|                         |              |        | 100 kHz |

### LIFETIME

Definition of LIFE: *UV irradiance reaches 50% of the initial irradiance*

| GERMICIDAL LAMPS               | LAMP LENGTH  | RATED CURRENT | LIFE (min) | AMBIENT TEMP. |
|--------------------------------|--------------|---------------|------------|---------------|
| Room temp. continuous lighting | 70mm         | 10 mA         | 30,000h    | 25±5°C        |
|                                | 150mm, 240mm | 15 mA         | 50,000h    |               |
| Low temp. continuous lighting  | 70mm         | 10 mA         | 1,800h     | 0±2°C         |
|                                | 150mm, 240mm | 15 mA         | 3,000h     |               |

### CAUTION! DIRECT EXPOSURE MAY RESULT IN EYE DAMAGE

Spectral output in the UV range is particularly dangerous to human vision. Even though this lamp has low power output, appropriate precautions should be taken at all times.

|          |                        |   |   |   |  |                                       |                          |                                  |          |                        |
|----------|------------------------|---|---|---|--|---------------------------------------|--------------------------|----------------------------------|----------|------------------------|
|          |                        | <b>METRIC</b><br><br>THIRD ANGLE PROJECTION |   | DIMENSIONS ARE IN MILLIMETERS<br>TOLERANCE UNLESS OTHERWISE SPECIFIED<br>1 PL +/- 0.2<br>2 PL +/- 0.20<br>ANGLE +/- 0 |  | <b>JKL COMPONENTS CORPORATION</b>     |                          |                                  |          |                        |
|          |                        |   |   |   |  | TITLE<br><b>4mm DIAMETER UVC LAMP</b> |                          |                                  |          |                        |
|          |                        | DRAWN BY<br>L. WENGSTROM                    |   | APPVD BY DATE<br>S.N. 6/4/20  |  | SIZE<br><b>A</b>                      | FSCM NO.<br><b>55335</b> | DRAWING NO.<br><b>BF UVC 4MM</b> |          |                        |
| REV. NO. | DESCRIPTION/ECO NUMBER | APPVD DATE                                  | - CAD DRAWING -<br>MANUAL REVISIONS NOT PERMITTED |   |  | SCALE<br>NONE                         | RELEASED DATE<br>6/4/20  | REVISION DATE                    | REV. NO. | SHEET<br><b>1 OF 2</b> |

## GENERAL CHARACTERISTICS - GERMICIDAL LAMPS (254 nm)

| GENERAL CHARACTERISTICS GERMICIDAL LAMPS |                                       |                                       |                                       |                                     |
|--|---------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|
| PART NAME & UNIT                         | BF470-UVC                             | BF4150-UVC                            | BF4240-UVC                            | NOTE                                |
| Lamp Length (mm)                         | 70                                    | 150                                   | 240                                   |                                     |
| Starting Voltage (V RMS)                 | 400 MAX                               | 600 MAX                               | 860 MAX                               | Ambient Temp. 25° C                 |
|  | 600 MAX                               | 900 MAX                               | 1300 MAX                              | Ambient Temp. 0° C                  |
| Recommended Applied Voltage (V RMS)      | 1000 MIN                              | 1200 MIN                              | 1500 MIN                              |                                     |
| Discharge in dark space (s)              | 1 MAX                                 | 1 MAX                                 | 1 MAX                                 |                                     |
| Lamp Current (mA RMS)                    | 10±0.05                               | 15±0.05                               | 15±0.05                               |                                     |
| Lamp Voltage (V RMS)                     | Initial 140±35<br>End of life 240 MAX | Initial 205±25<br>End of life 320 MAX | Initial 320±50<br>End of life 440 MAX |                                     |
| Lamp power consumption (W)               | Initial 1.4                           | Initial 3.1                           | Initial 4.7                           |                                     |
| UV irradiance (µW/cm²)                   | 2.1±0.5                               | 6.7±0.9                               | 11.4±1.5                              | Measurement distance shall be 1.0 m |
| UV Radian Flux (W)                       | 0.2                                   | 0.6                                   | 1.1                                   |                                     |
| Time to Stabilize UV irradiance (s)      | 60 MAX                                | 60 MAX                                | 60 MAX                                |                                     |

## GERMICIDAL LAMP SPECTRUM (254 nm)

