

KP-1608F3C

KP-1608SF4C

### Features

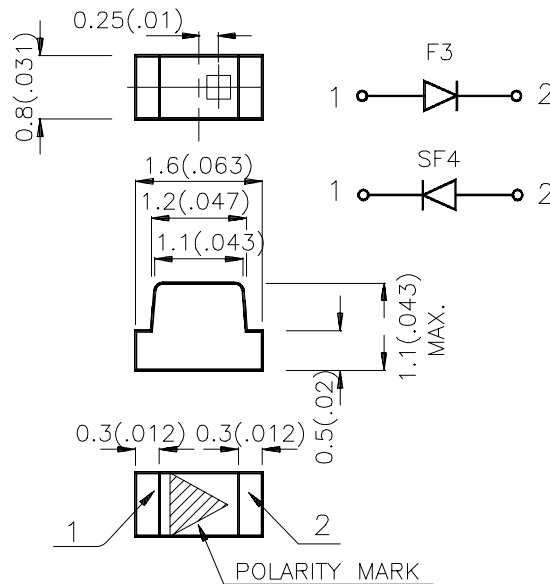
- WATER CLEAR LENS AVAILABLE.
- 1.6mmx0.8mm SMT LED, 1.1mm THICKNESS.
- HIGH POWER OUTPUT.
- PACKAGE : 2000PCS / REEL.

### Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

SF4 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

### Package Dimensions



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$  unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No.    | Dice   | Lens Type   | Po= (mW/sr)<br>@20mA |      | Viewing<br>Angle |
|-------------|--------|-------------|----------------------|------|------------------|
|             |        |             | Min.                 | Typ. | 2 $\theta$ 1/2   |
| KP-1608F3C  | GaAs   | WATER CLEAR | 0.5                  | 1.2  | 120°             |
| KP-1608SF4C | GaAlAs | WATER CLEAR | 0.5                  | 1    | 120°             |

Note:

1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

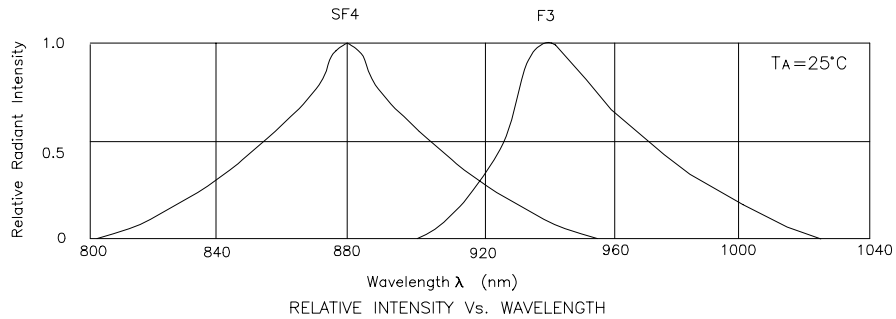
| Item                     | P/N       | Symbol            | Typ.       | Max.       | Unit | Condition     |
|--------------------------|-----------|-------------------|------------|------------|------|---------------|
| Forward Voltage          | F3<br>SF4 | V <sub>F</sub>    | 1.2<br>1.3 | 1.5<br>1.7 | V    | IF=20mA       |
| Reverse Current          | F3<br>SF4 | I <sub>R</sub>    | -          | 10<br>10   | μA   | VR=5V         |
| Capacitance              | F3<br>SF4 | C                 | 90<br>90   | -          | pF   | VF=0V, f=1MHz |
| Peak Spectral Wavelength | F3<br>SF4 | λ <sub>P</sub>    | 940<br>880 | -          | nm   | IF=20mA       |
| Spectral Bandwidth       | F3<br>SF4 | Δλ <sub>1/2</sub> | 50<br>50   | -          | nm   | IF=20mA       |

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

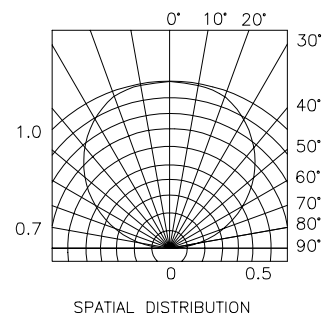
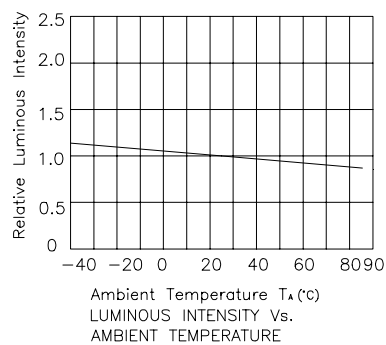
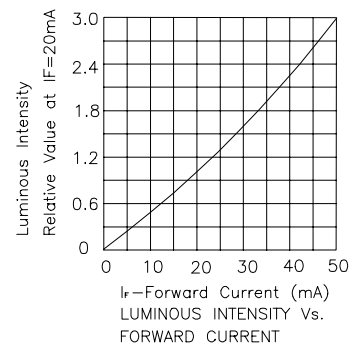
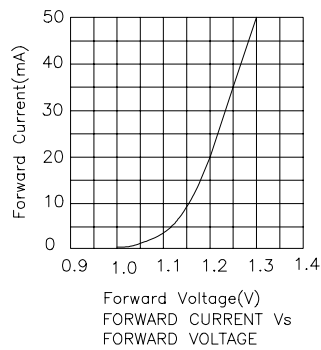
| Item                    | Symbol           | F3&SF4   | Units |
|-------------------------|------------------|----------|-------|
| Power Dissipation       | P <sub>T</sub>   | 100      | mW    |
| Forward Current         | I <sub>F</sub>   | 50       | mA    |
| Peak Forward Current[1] | i <sub>FS</sub>  | 1.2      | A     |
| Reverse Voltage         | V <sub>R</sub>   | 5        | V     |
| Operating Temperature   | T <sub>A</sub>   | -40~ +85 | °C    |
| Storage Temperature     | T <sub>STG</sub> | -40~ +85 | °C    |

Note:

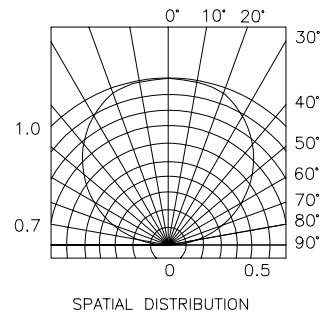
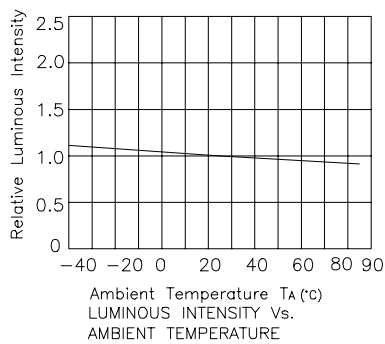
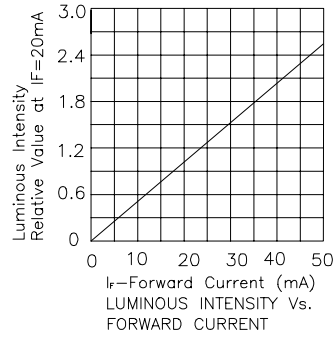
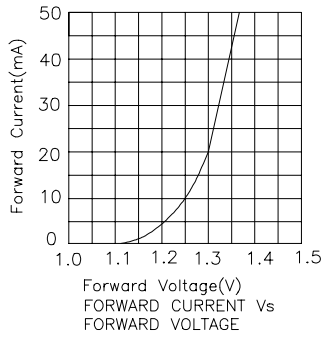
1. 1/100 Duty Cycle, 10us Pulse Width.



## KP-1608F3C

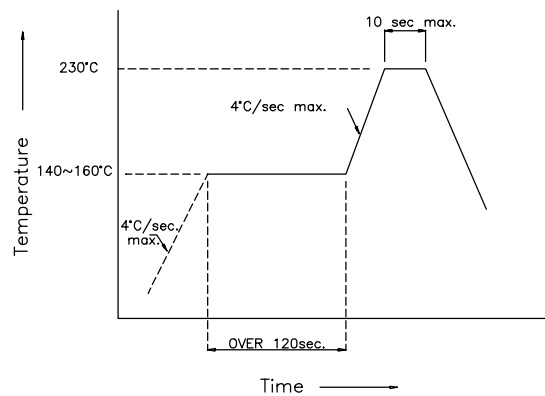


## KP-1608SF4C

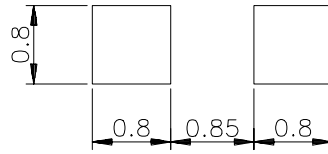


### KP-1608F3C, KP-1608SF4C SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



## Recommended Soldering Pattern (Units : mm)



## Tape Specifications (Units : mm)

