

INFRA-RED EMITTING DIODES

KP-3216F3C KP-3216SF4C

Features

- •WATER CLEAR LENS AVAILABLE.
- •3.2mmx1.6mm SMT LED, 1.1mm THICKNESS.
- •HIGH POWER OUTPUT.
- ●PACKAGE: 2000PCS/REEL.

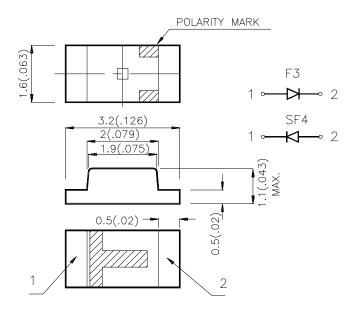
Description

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 $\pm 0.2 (0.0079")$ unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

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Selection Guide

| Part No. | Dice | Lens Type | Po= (mW/sr) @20mA | | Viewing Angle |
|-------------|--------|-------------|-----------------------------|------|-------------------------|
| | | | Min. | Тур. | 201/2 |
| KP-3216F3C | GaAs | WATER CLEAR | 0.5 | 1.2 | 120° |
| KP-3216SF4C | GaAlAs | WATER CLEAR | 0.5 | 1 | 120° |

Note

Electrical / Optical Characteristics at T_A=25°C

| Item | P/N | Symbol | Тур. | Max. | Unit | Condition |
|--------------------------|-----------|----------------|------------|------------|------|---------------|
| Forward Voltage | F3 SF4 | V _F | 1.2 1.3 | 1.5 1.7 | V | IF=20mA |
| Reverse Current | F3 SF4 | I _R | - | 10 10 | uA | VR=5V |
| Capacitance | F3 SF4 | С | 90 90 | - | pF | VF=0V, f=1MHz |
| Peak Spectral Wavelength | F3 SF4 | λР | 940 880 | - | nm | IF=20mA |
| Spectral Bandwidth | F3 SF4 | Δλ | 50 50 | - | nm | IF=20mA |

Absolute Maximum Ratings at T_A=25°C

| Item | Symbol | F3&SF4 | Units |
|-------------------------|------------------|----------|-------|
| Power Dissipation | P _T | 100 | mW |
| Forward Current | I _F | 50 | mA |
| Peak Forward Current[1] | i _{FS} | 1.2 | Α |
| Reverse Voltage | V_R | 5 | V |
| Operating Temperature | T _A | -40~ +85 | °C |
| Storage Temperature | T _{STG} | -40~ +85 | °C |

Note

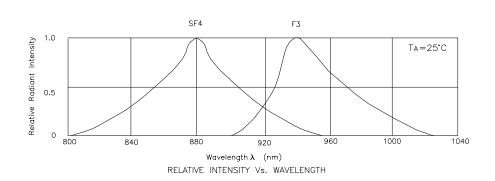
1.1/100 Duty Cycle, 10us Pluse Width.

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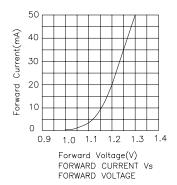
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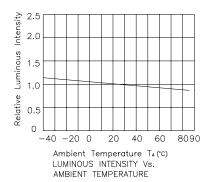
^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

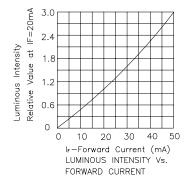


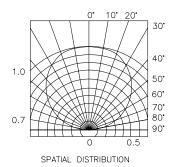


KP-3216F3C





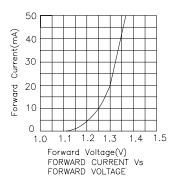


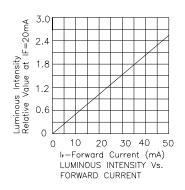


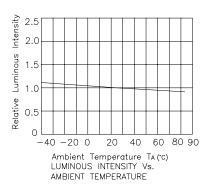
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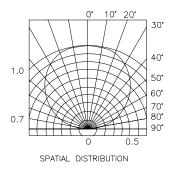
Kingbright

KP-3216SF4C



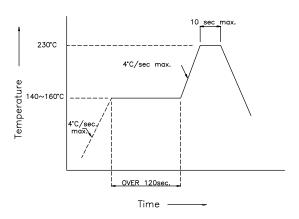






KP-3216F3C,KP-3216SF4C **SMT Reflow Soldering Instructions**

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



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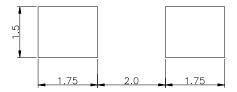
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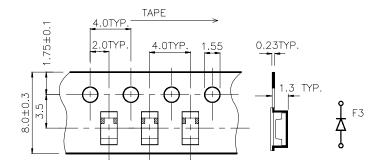
Recommended Soldering Pattern

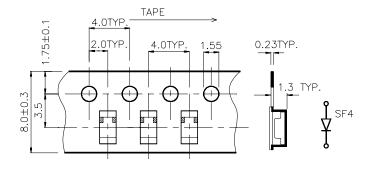
(Units : mm)



Tape Specifications

(Units : mm)





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