

KP-1608F3C

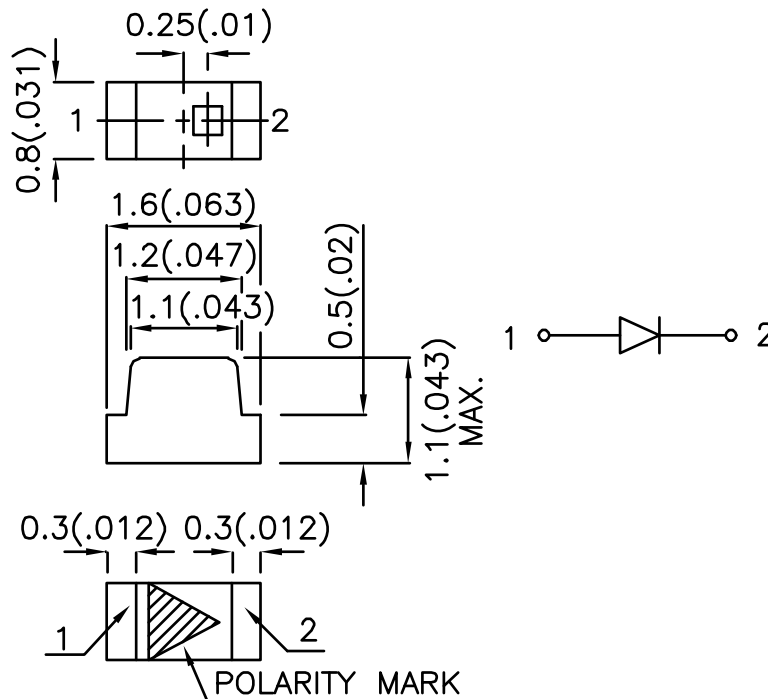
Features

- 1.6mmX0.8mm SMT LED, 1.1mm THICKNESS.
- MECHANICALLY AND SPECTRALLY MATCHED TO KP-1608 PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- PACKAGE: 2000PCS / REEL.
- RoHS COMPLIANT.

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.1 (0.004") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Po (mW/sr) @ 20mA | | Viewing Angle |
|------------|------|-------------|----------------------|------|------------------|
| | | | Min. | Typ. | θ1/2 |
| KP-1608F3C | GaAs | WATER CLEAR | 0.4 | 1.2 | 120° |

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

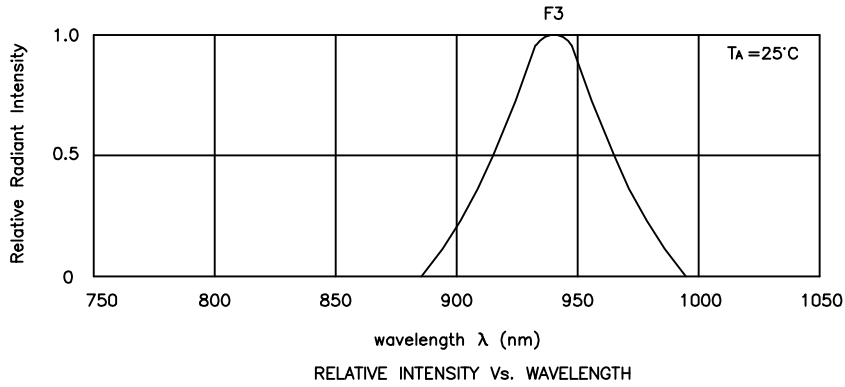
| Item | P/N | Symbol | Typ. | Max. | Units | Test Conditions |
|--------------------------|-----|-------------------|------|------|-------|---------------------------|
| Forward Voltage | F3 | V _F | 1.2 | 1.6 | V | I _F =20mA |
| Reverse Current | F3 | I _R | - | 10 | uA | V _R =5V |
| Capacitance | F3 | C | 90 | - | pF | V _F =0V;f=1MHz |
| Peak Spectral Wavelength | F3 | λ _P | 940 | - | nm | I _F =20mA |
| Spectral Bandwidth | F3 | Δλ _{1/2} | 50 | - | nm | I _F =20mA |

Absolute Maximum Ratings at TA=25°C

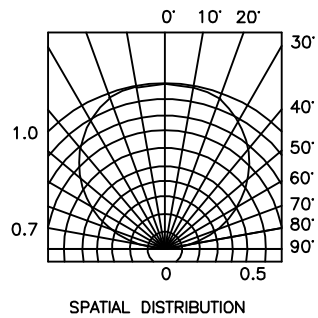
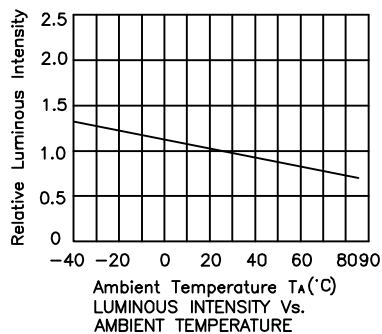
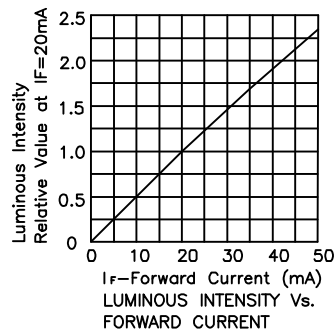
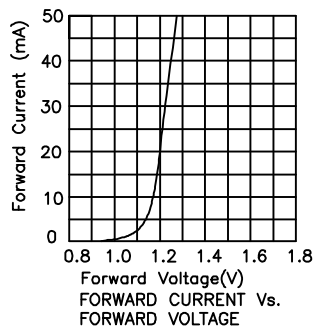
| Parameter | Symbol | F3 | Units |
|-------------------------|------------------|------------|-------|
| Power Dissipation | P _T | 100 | mW |
| DC Forward Current | I _F | 50 | mA |
| Peak Forward Current[1] | i _F S | 1.2 | A |
| Reverse Voltage | V _R | 5 | V |
| Operating Temperature | T _A | -40 To +85 | °C |
| Storage Temperature | T _{STG} | -40 To +85 | °C |

Note:

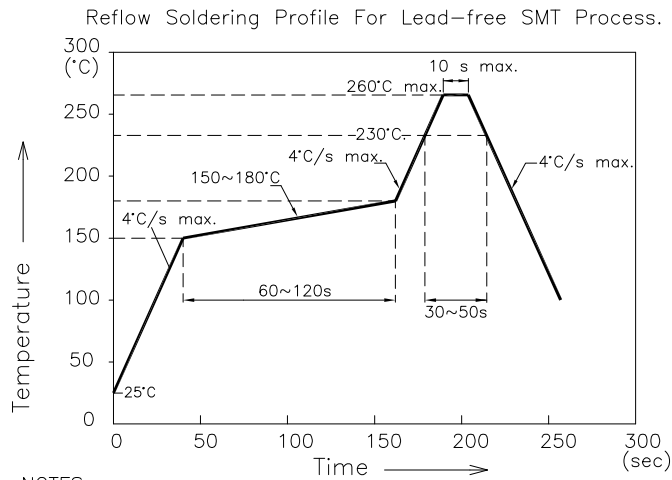
1. 1/100 Duty Cycle, 10μs Pulse Width.



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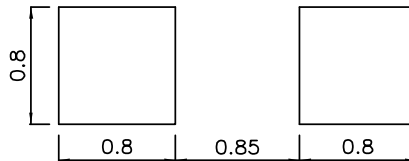
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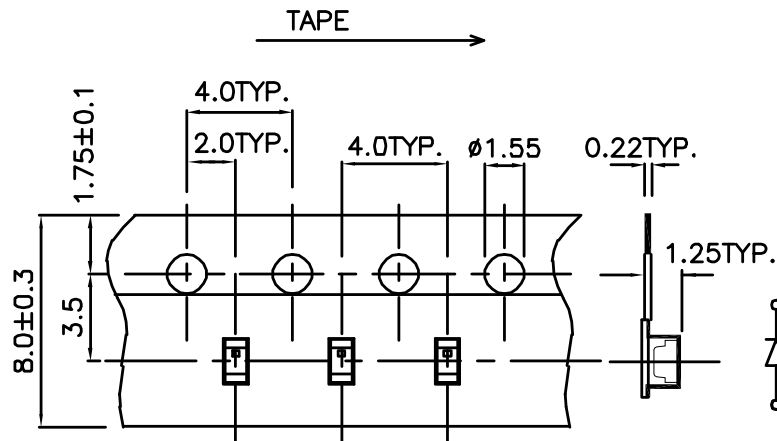
NOTES:

1. We recommend the reflow temperature 245°C(±5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage or radiant intensity), the typical accuracy of the sorting process is as follows:

1. Radiant Intensity: +/-15%
2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.