

AP1608F3C

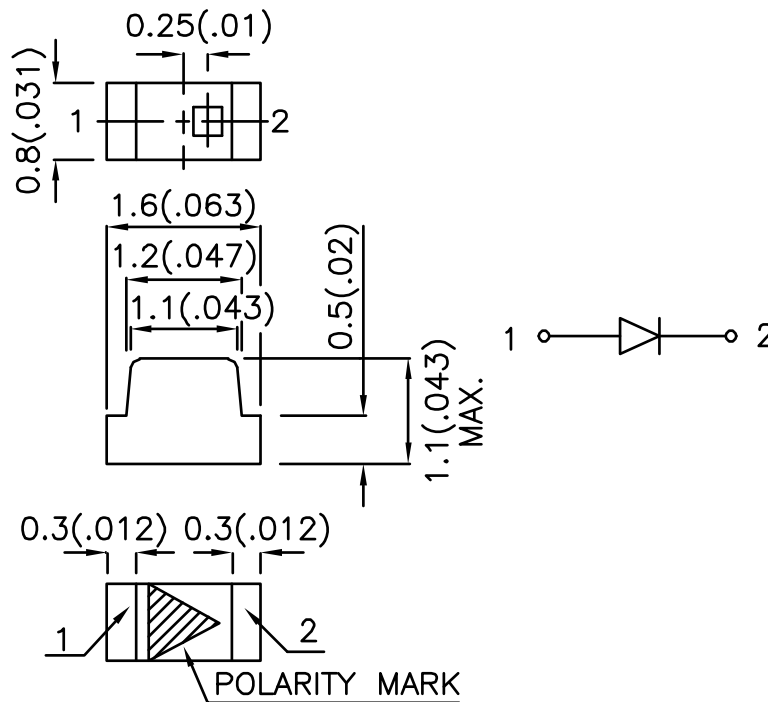
### Features

- 1.6mmX0.8mm SMT LED, 1.1mm THICKNESS.
- MECHANICALLY AND SPECTRALLY MATCHED TO AP1608 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  $\pm 0.1(0.004)$  unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

| Part No.  | Dice | Lens Type   | Po (mW/sr)<br>@ 20mA |      | Viewing<br>Angle |
|-----------|------|-------------|----------------------|------|------------------|
|           |      |             | Min.                 | Typ. | θ1/2             |
| AP1608F3C | 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

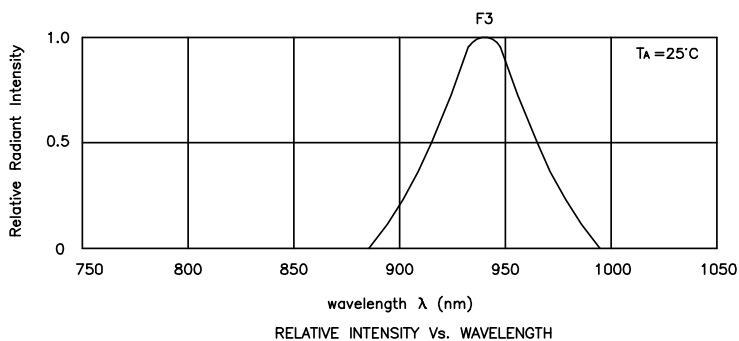
| Item                     | P/N | Symbol            | Typ. | Max. | Units | Test Conditions           |
|--------------------------|-----|-------------------|------|------|-------|---------------------------|
| Forward Voltage          | F3  | V <sub>F</sub>    | 1.2  | 1.6  | V     | I <sub>F</sub>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

## Absolute Maximum Ratings at TA=25°C

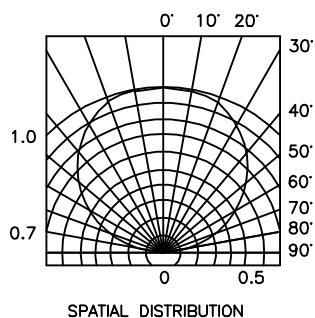
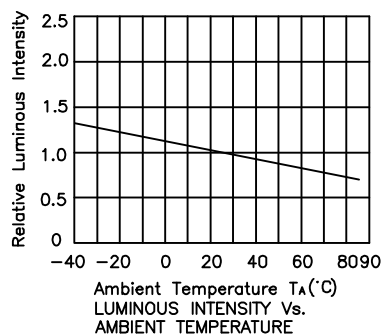
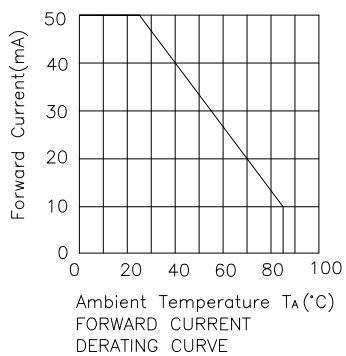
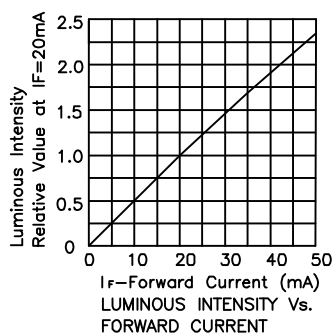
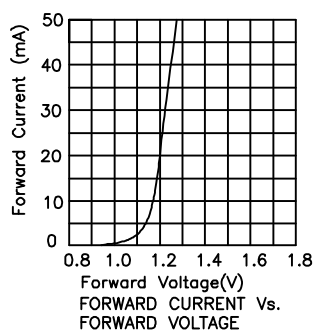
| Parameter               | Symbol           | F3         | Units |
|-------------------------|------------------|------------|-------|
| Power Dissipation       | P <sub>T</sub>   | 100        | mW    |
| DC Forward Current      | I <sub>F</sub>   | 50         | mA    |
| Peak Forward Current[1] | i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

Note:

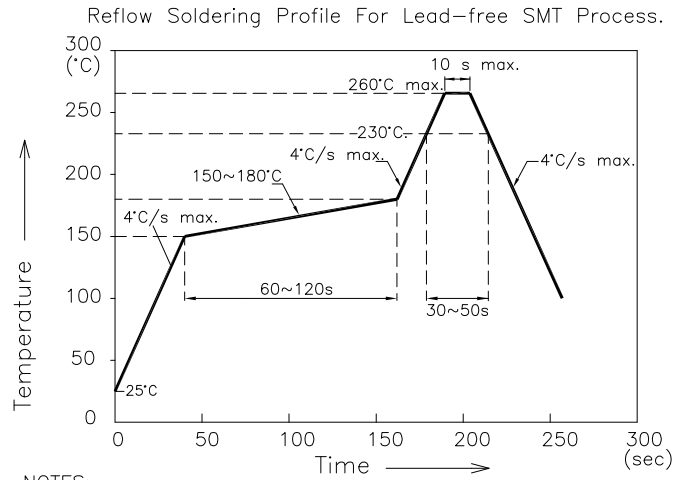
1. 1/100 Duty Cycle, 10μs Pulse Width.



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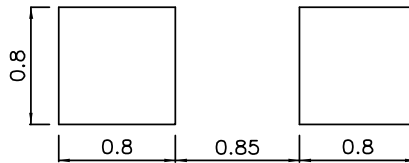
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NOTES:

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)

