

Part Number: APA3010SF4C

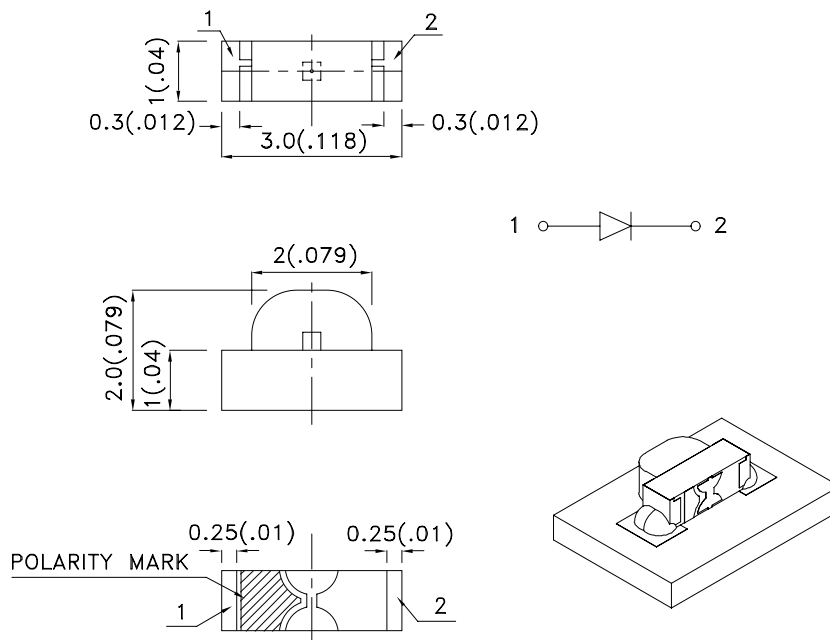
Features

- 3.0mmx1.0mm RIGHT ANGLE SMT LED, 2.0mm THICKNESS.
- MECHANICALLY AND SPECTRALLY MATCHED TO PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.

Description

SF4 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.15(0.006")$ unless otherwise noted.
3. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

| Part No. | Dice | Lens Type | Po (mW/sr) [2] @ 20mA | | Viewing Angle [1] |
|-------------|--------------|-------------|--------------------------|------|-------------------|
| | | | Min. | Typ. | 2 θ 1/2 |
| APA3010SF4C | SF4 (GaAlAs) | WATER CLEAR | 0.4 | 1 | 120° |

Notes:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Radiant Intensity/ luminous flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Parameter | P/N | Symbol | Typ. | Max. | Units | Test Conditions |
|--------------------------|-----|------------------------|------|------|-------|---------------------------|
| Forward Voltage [1] | SF4 | V _F | 1.3 | 1.6 | V | I _F =20mA |
| Reverse Current | SF4 | I _R | | 10 | uA | V _R = 5V |
| Capacitance | SF4 | C | 90 | | pF | V _F =0V;f=1MHz |
| Peak Spectral Wavelength | SF4 | λ _P | 880 | | nm | I _F =20mA |
| Spectral Bandwidth | SF4 | $\Delta\lambda$ 1/2 | 50 | | nm | I _F =20mA |

Note:

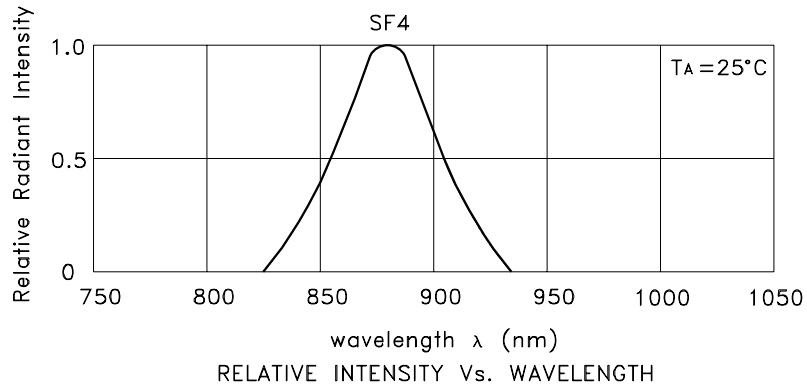
1. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

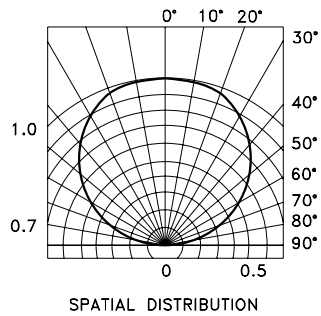
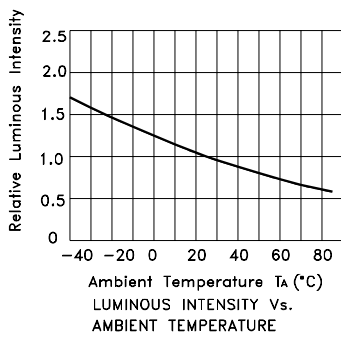
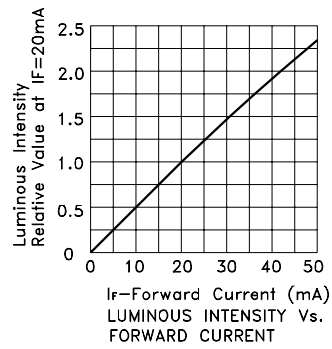
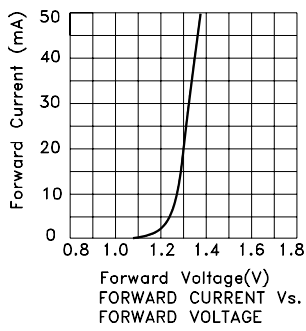
| Parameter | Symbol | SF4 | Units |
|--------------------------|------------------|------------|-------|
| Power dissipation | P _T | 80 | mW |
| DC Forward Current | I _F | 50 | mA |
| Peak Forward Current [1] | i _{FS} | 1.2 | A |
| Reverse Voltage | V _R | 5 | V |
| Operating Temperature | T _A | -40 To +85 | °C |
| Storage Temperature | T _{STG} | -40 To +85 | °C |

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



APA3010SF4C



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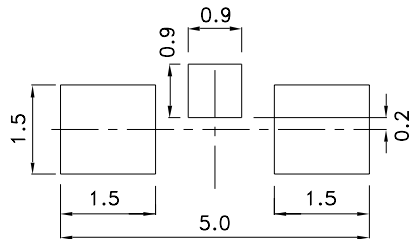
Reflow Soldering Profile For Lead-free SMT Process.



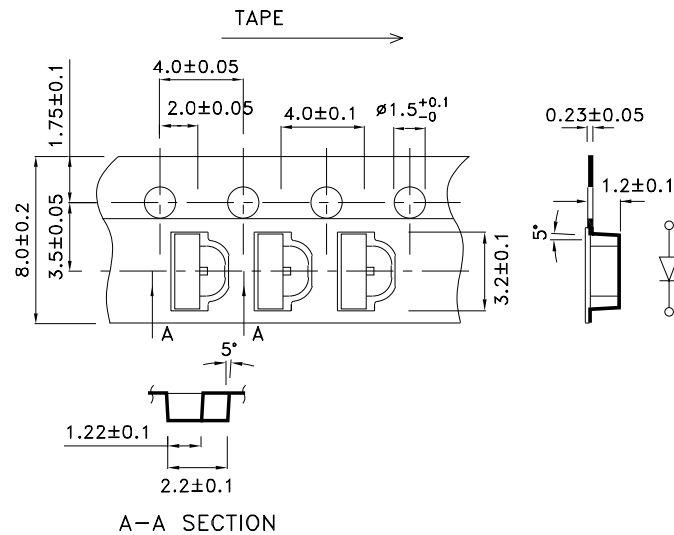
NOTES:

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; Tolerance: ± 0.1)



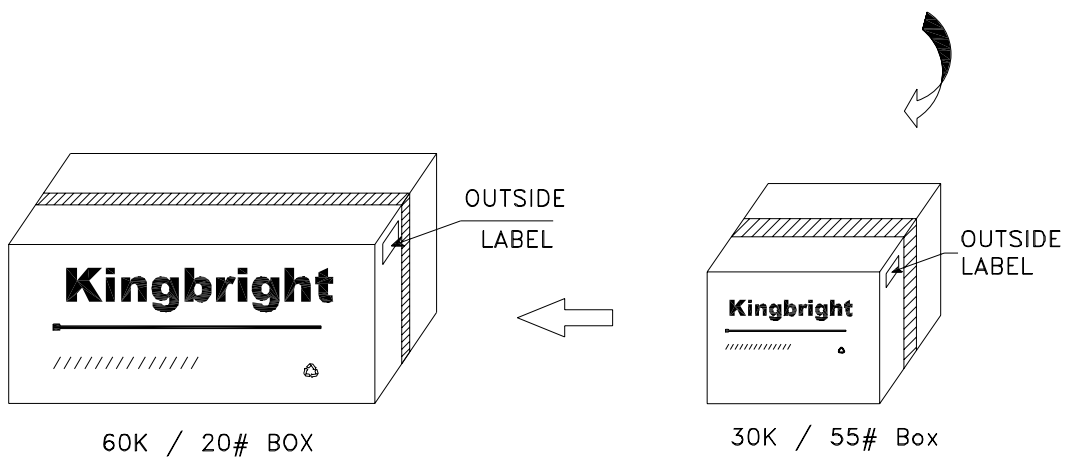
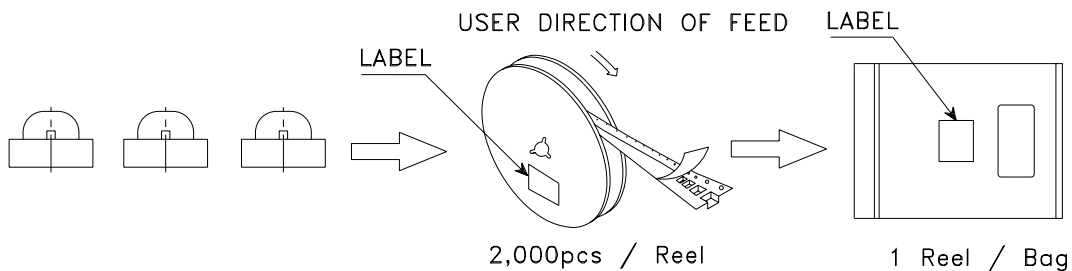
Tape Specifications
(Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

APA3010SF4C



| | |
|--|--|
| <h1>Kingbright</h1> | |
| P/NO: APA3010xxx | |
| QTY: 2,000 pcs | Q.C. Q C xx xx xxxx PASSED |
| S/N: XXXX | |
| CODE: XXX | |
| LOT NO: | |
|  xxxxxxxxxxxxxxxxxxxxxxxxxxxx | |
| RoHS Compliant | |