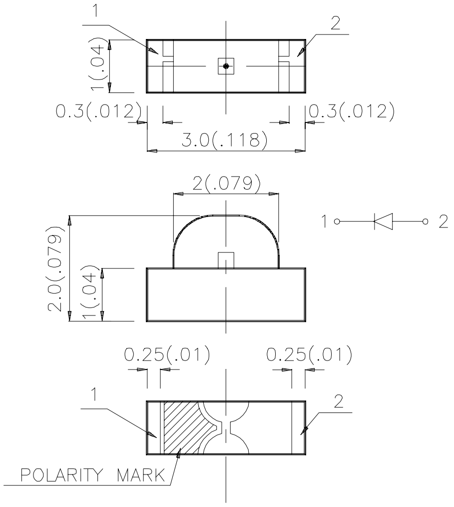
## Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.15(0.006") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

# 3.0x1.0mm SMD CHIP LED LAMP

EPA3010SF4C

## Features

1.3.0mmx1.0mm SMT LED, 2.0mm THICKNESS.
2.LOW POWER CONSUMPTION.
3.WIDE VIEWING ANGLE.
4.IDEAL FOR BACKLIGHT AND INDICATOR.
5.VARIOUS COLORS AND LENS TYPES AVAILABLE.

## Description

SF4 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

## Selection Guide

| Part No. | Emitting Color +Material | P(nm) | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|---|---|---|---|---|---|---|
| | | | | Min. | Typ. | 2 θ 1/2 |
| | | | | | | |
| EPA3010SF4C | GaAlAs | 880 | WATER CLEAR | 0.5 | 1.0 | 120° |

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

DATA NO :EA0225 | REV NO :V1 | DATE :SEP/03/2001

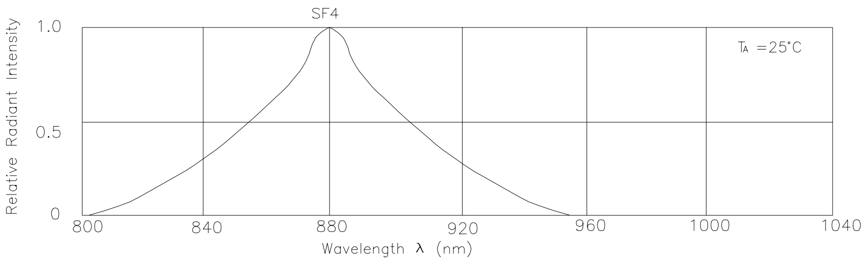
## Electrical / Optical Characteristics at $T_A$=25°C

| Item | P/N | Symbol | Typ. | Max. | Unit | Condition |
|---|---|---|---|---|---|---|
| Forward Voltage | SF4 | $V_F$ | 1.3 | 1.6 | V | $I_F$=20mA |
| Reverse Current | SF4 | $I_R$ | - | 10 | uA | $V_R$=5V |
| Junction Capacitance | SF4 | C | 90 | - | pF | V=0 f=1MHz |
| Peak Spectral Wavelength | SF4 | λP | 880 | - | nm | $I_F$=20mA |
| Spectral Bandwidth | SF4 | Δλ | 50 | - | nm | $I_F$=20mA |

## Absolute Maximum Ratings at $T_A$=25°C

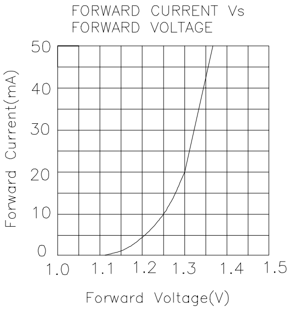
| Item | Symbol | Maximum Rating | Units |
|---|---|---|---|
| Power Dissipation | Pd | 100 | mW |
| Forward Current | $I_F$ | 50 | mA |
| Peak Forward Current | $I_P$ | 1.0 | A |
| Reverse Voltage | $V_R$ | 5 | V |
| Operating Temperature | Topr | -40~ +85 | °C |
| Storage Temperature | Tstg | -40~ +85 | °C |

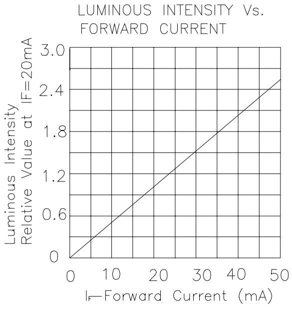
Note:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

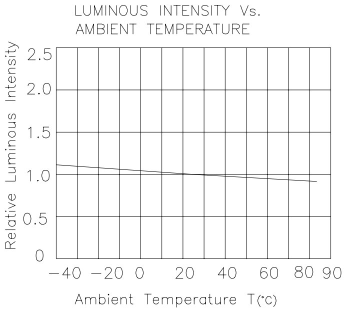


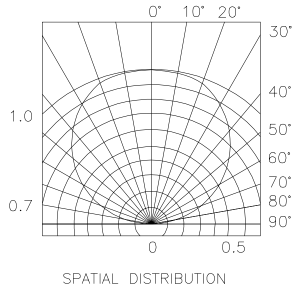
RELATIVE INTENSITY Vs. WAVELENGTH

## EPA3010SF4C



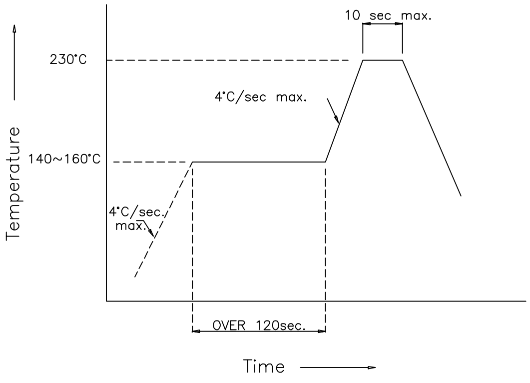




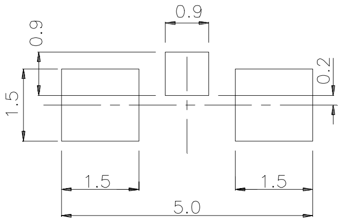


## EPA3010SF4C SMT Reflow Soldering Instructions

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



## EPA3010SF4C Recommended Soldering Pattern (Units : mm)



## EPA3010SF4C Tape Specifications (Units : mm)

PACKAGE : 2000PCS / REEL