

Kingbright

T-1 3/4 (5mm) INFRA-RED EMITTING DIODE

WP7113SF6C

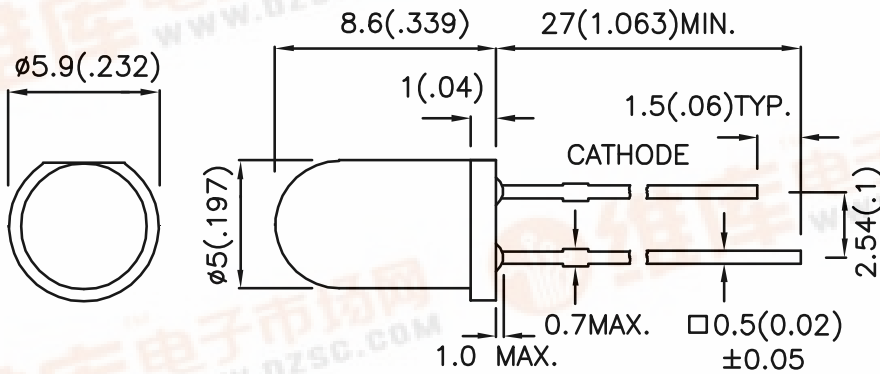
Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- RoHS COMPLIANT.

Description

SF6 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25 (0.01)$ unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Po (mW/sr) @ 20 mA*50mA | | Viewing Angle |
|------------|--------|-------------|----------------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| WP7113SF6C | GaAlAs | WATER CLEAR | 10 | 40 | 20° |
| | | | *50 | *100 | 20° |

Notes:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. * Luminous intensity with asterisk is measured at 50mA.

Electrical / Optical Characteristics at TA=25°C

| Item | P/N | Symbol | Typ. | Max. | Units | Condition |
|--------------------------|-----|-------------------|------|------|-------|---------------------------|
| Forward Voltage | SF6 | V _F | 1.35 | 1.6 | V | I _F =20mA |
| Reverse Current | SF6 | I _R | - | 10 | μA | V _R =5V |
| Junction Capacitance | SF6 | C | 30 | - | pF | V _F =0V;f=1MHz |
| Peak Spectral Wavelength | SF6 | λ _P | 860 | - | nm | I _F =20mA |
| Spectral Bandwidth | SF6 | Δλ _{1/2} | 50 | - | nm | I _F =20mA |

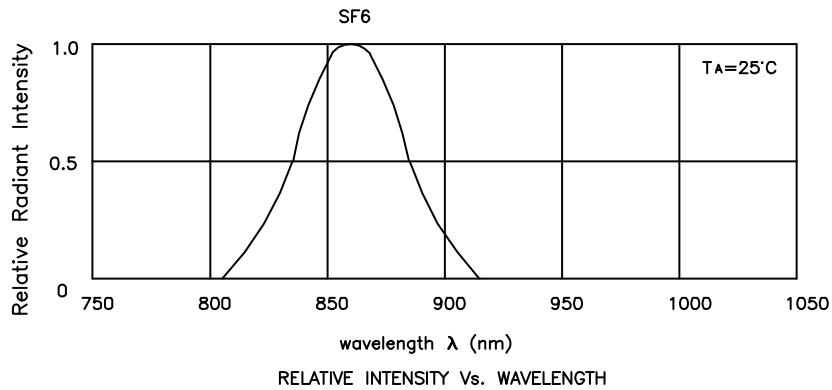
Absolute Maximum Ratings at TA=25°C

| Item | Symbol | SF6 | Units |
|-----------------------------|------------------|---------------------|-------|
| Power dissipation | P _T | 100 | mW |
| Forward Current | I _F | 50 | mA |
| Peak Forward Current [1] | i _{FS} | 1 | A |
| Reverse Voltage | V _R | 5 | V |
| Operating Temperature | T _{opr} | -40°C To +85°C | |
| Storage Temperature | T _{stg} | -40°C To +85°C | |
| Lead Solder Temperature [2] | | 260°C For 3 Seconds | |
| Lead Solder Temperature [3] | | 260°C For 5 Seconds | |

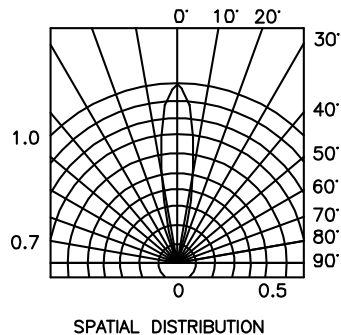
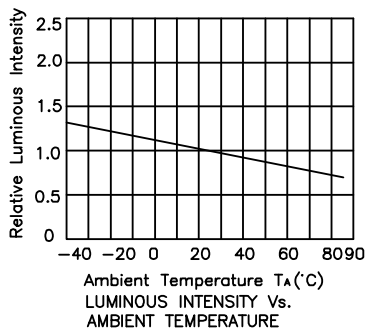
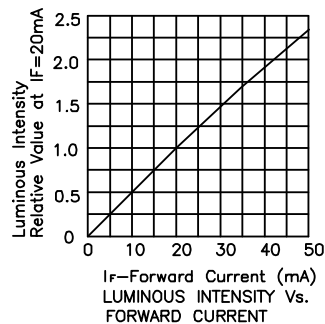
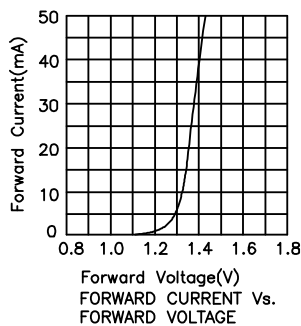
Notes:

1. 1/100 Duty Cycle, 10us Pulse Width.
2. 2mm below package base.
3. 5mm below package base.

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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:

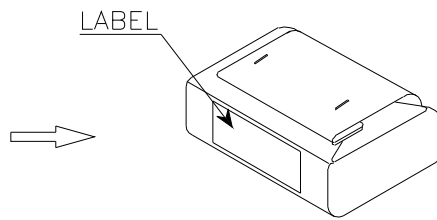
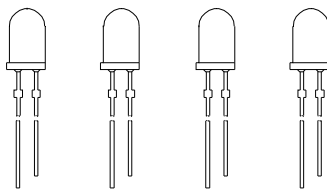
1. Radiant Intensity: +/-15%
2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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PACKING & LABEL SPECIFICATIONS

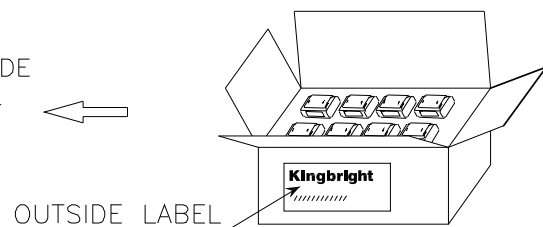
WP7113SF6C




1,000PCS / BAG



36K / 9# BOX



18K / 5# BOX

| | |
|---|--|
| Kingbright | |
| Q.C. | <div style="border: 1px solid black; border-radius: 50%; padding: 2px; display: inline-block;"> QC XXX XX XXXX PASSED </div> |
| TYPE NO : WP7113XXX | |
| QUANTITY : 1,000 pcs | |
| S/N : XXX | CODE: XX |
| LOT NO :  <small>XXXXXXXXXX</small> | |
| RoHS Compliant | |