

W53SF6C

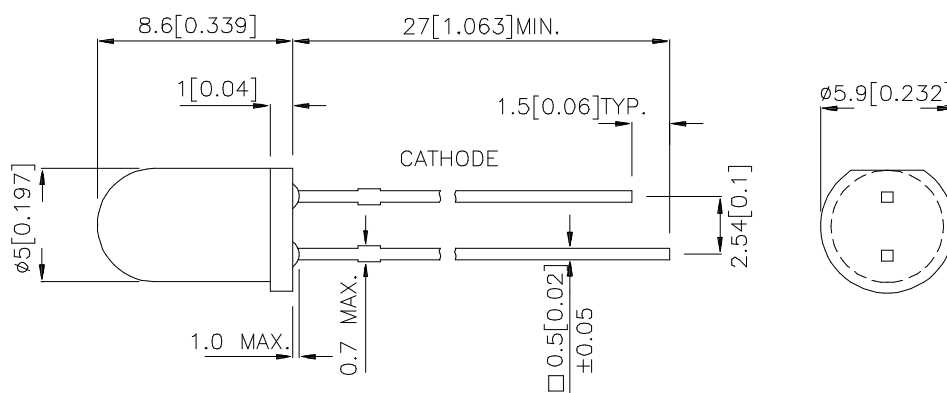
### Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE L-51P3C PHOTOTRANSISTOR.
- BOTH WATER CLEAR LENS AND BLUE TRANSPARENT LENS AVAILABLE

### 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 lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

| Part No. | Dice   | Lens Type   | Po(mW/sr)<br>@ 20 mA *50mA |      | Viewing<br>Angle |
|----------|--------|-------------|----------------------------|------|------------------|
|          |        |             | Min.                       | Typ. | 2θ1/2            |
| W53SF6C  | GaAlAs | WATER CLEAR | 10                         | 40   | 20°              |
|          |        |             | *50                        | *100 | 20°              |

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 T<sub>A</sub>=25°C

| Item                     | P/N | Symbol            | Typ. | Max. | Unit | Condition                  |
|--------------------------|-----|-------------------|------|------|------|----------------------------|
| Forward Voltage          | SF6 | V <sub>F</sub>    | 1.35 | 1.6  | V    | I <sub>F</sub> =20mA       |
| Reverse Current          | SF6 | I <sub>R</sub>    | -    | 10   | uA   | V <sub>R</sub> =5V         |
| Junction Capacitance     | SF6 | C                 | 30   | -    | pF   | V <sub>F</sub> =0V; f=1MHz |
| Peak Spectral Wavelength | SF6 | λ <sub>P</sub>    | 860  | -    | nm   | I <sub>F</sub> =20mA       |
| Spectral Bandwidth       | SF6 | Δλ <sub>1/2</sub> | 50   | -    | nm   | I <sub>F</sub> =20mA       |

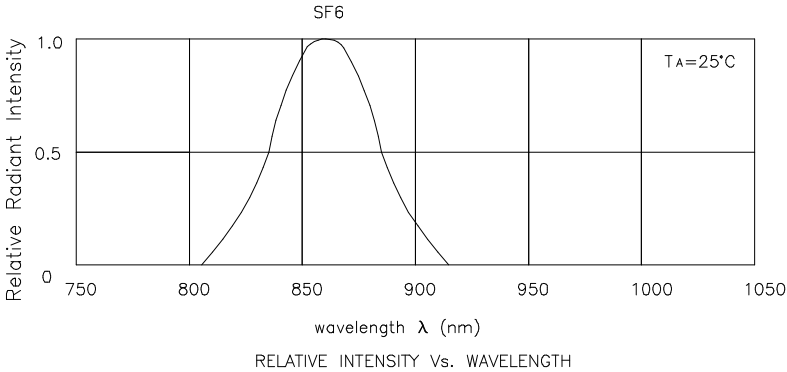
## Absolute Maximum Ratings at T<sub>A</sub>=25°C

| Item                        | Symbol              | SF6      | Units |
|-----------------------------|---------------------|----------|-------|
| Power Dissipation           | P <sub>T</sub>      | 100      | mW    |
| Forward Current             | I <sub>F</sub>      | 50       | mA    |
| Peak Forward Current[1]     | i <sub>FS</sub>     | 1        | A     |
| Reverse Voltage             | V <sub>R</sub>      | 5        | V     |
| Operating Temperature       | T <sub>opr</sub>    | -40~ +85 | °C    |
| Storage Temperature         | T <sub>stg</sub>    | -40~ +85 | °C    |
| Lead Solder Temperature [2] | 260°C For 5 Seconds |          |       |

Notes:

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

2. 2mm below package base.



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