

W34SF7C

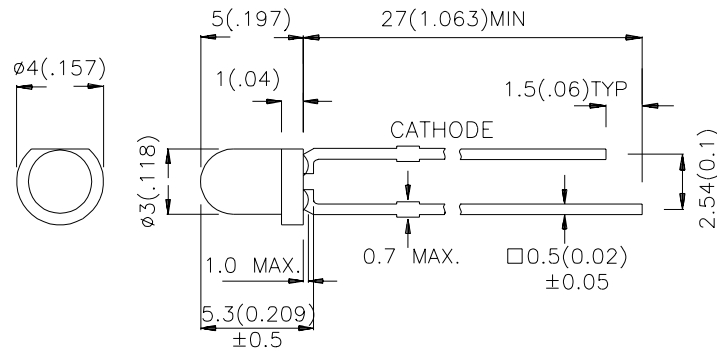
### Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.

### Description

SF7 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            |
| W34SF7C  | GaAlAs | WATER CLEAR | 7                          | 18   | 50°              |
|          |        |             | *10                        | *45  | 50°              |

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

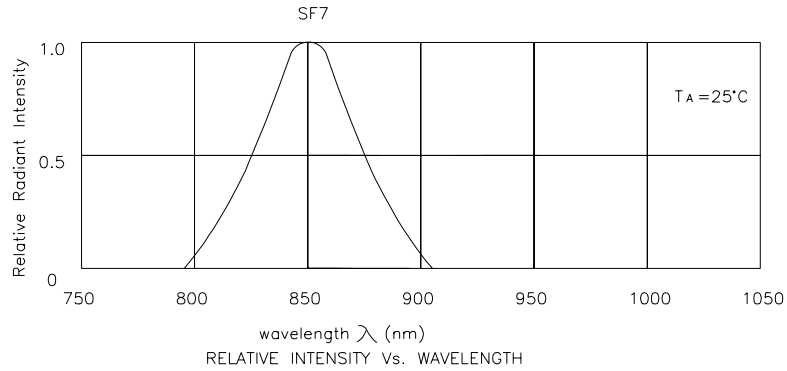
| Parameter                | P/N | Symbol            | Typ. | Max. | Unit | Condition                  |
|--------------------------|-----|-------------------|------|------|------|----------------------------|
| Forward Voltage          | SF7 | V <sub>F</sub>    | 1.4  | 1.6  | V    | I <sub>F</sub> =20mA       |
| Reverse Current          | SF7 | I <sub>R</sub>    | -    | 10   | μA   | V <sub>R</sub> =5V         |
| Junction Capacitance     | SF7 | C                 | 30   | -    | pF   | V <sub>F</sub> =0V, f=1MHz |
| Peak Spectral Wavelength | SF7 | λ <sub>P</sub>    | 850  | -    | nm   | I <sub>F</sub> =20mA       |
| Spectral Bandwidth       | SF7 | Δλ <sub>1/2</sub> | 50   | -    | nm   | I <sub>F</sub> =20mA       |

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

| Parameter                  | Symbol              | SF7      | 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>A</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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