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|----------|-----------|
| L-34F3C | L-34F3BT |
| L-34SF4C | L-34SF4BT |
| L-34SF6C | L-34SF6BT |
| L-34SF7C | L-34SF7BT |

Features

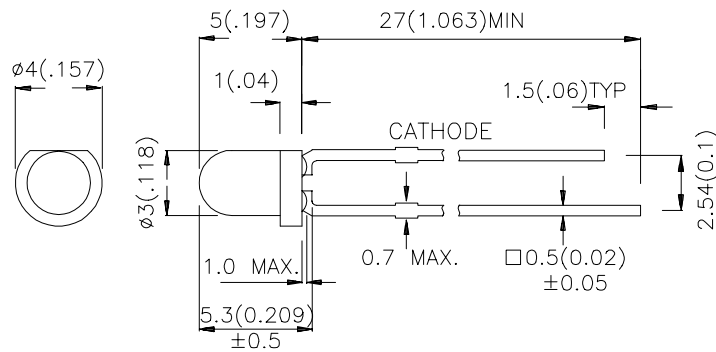
- MECHANICALLY AND SPECTRALLY MATCHED TO THE L-32P3C PHOTOTRANSISTOR.
- BOTH WATER CLEAR LENS AND BLUE TRANSPARENT LENS AVAILABLE HIGH POWER OUTPUT.

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

SF4 and SF6 and 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) @20mA | | Po (mW/sr) @50mA | | Viewing Angle |
|-----------|--------|------------------|---------------------|------|---------------------|------|------------------|
| | | | Min. | Typ. | Min. | Typ. | 2 θ 1/2 |
| L-34F3C | GaAs | WATER CLEAR | 2 | 10 | 5 | 20 | 50° |
| L-34F3BT | GaAs | BLUE TRANSPARENT | 2 | 5 | 8 | 20 | 50° |
| L-34SF4C | GaAlAs | WATER CLEAR | 2 | 10 | 5 | 20 | 50° |
| L-34SF4BT | GaAlAs | BLUE TRANSPARENT | 2 | 4 | 8 | 20 | 50° |
| L-34SF6C | GaAlAs | WATER CLEAR | 7 | 15 | 10 | 40 | 50° |
| L-34SF6BT | GaAlAs | BLUE TRANSPARENT | 7 | 15 | 10 | 40 | 50° |
| L-34SF7C | GaAlAs | WATER CLEAR | 7 | 18 | 10 | 45 | 50° |
| L-34SF7BT | GaAlAs | BLUE TRANSPARENT | 7 | 18 | 10 | 45 | 50° |

Note:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

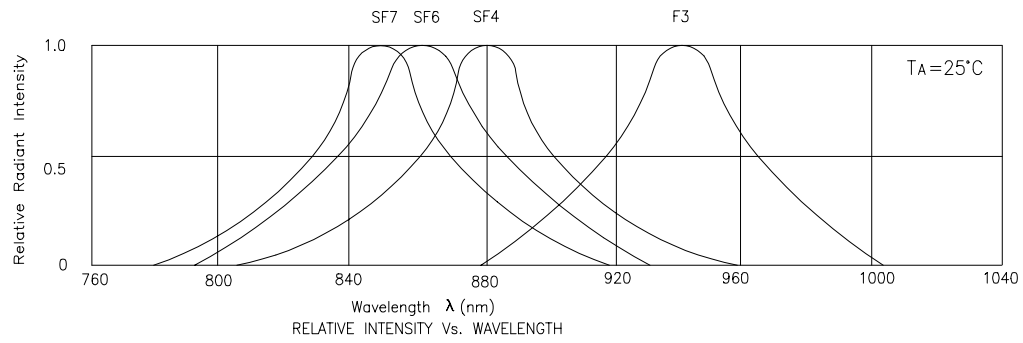
| Item | P/N | Symbol | Typ. | Max. | Unit | Condition |
|--------------------------|-------------------------|-----------------|---------------------------|--------------------------|------|---------------|
| Forward Voltage | F3 SF4 SF6 SF7 | V _F | 1.2 1.3 1.35 1.4 | 1.5 1.7 1.6 1.8 | V | IF=20mA |
| Reverse Current | F3 SF4 SF6 SF7 | I _R | - | 10 10 10 10 | uA | VR=5V |
| Junction Capacitance | F3 SF4 SF6 SF7 | C | 90 90 30 30 | - | pF | VF=0V; f=1MHz |
| Peak Spectral Wavelength | F3 SF4 SF6 SF7 | λ P | 940 880 860 850 | - | nm | IF=20mA |
| Spectral Bandwidth | F3 SF4 SF6 SF7 | $\Delta\lambda$ | 50 50 50 41 | - | nm | IF=20mA |

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

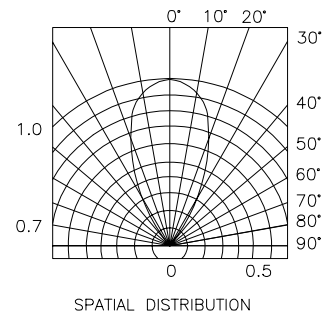
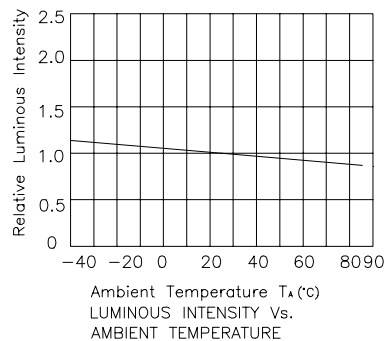
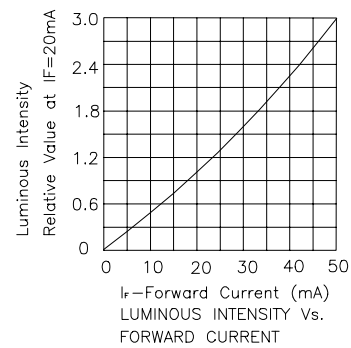
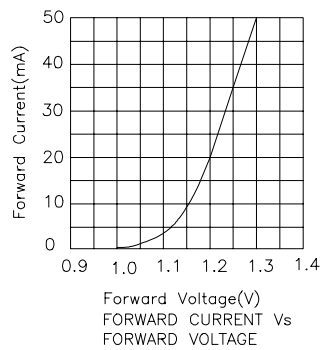
| Item | Symbol | F3&SF4 | SF6&SF7 | Units |
|-----------------------------|------------------------------------|----------|----------|------------------|
| Power Dissipation | P_d | 100 | 100 | mW |
| Forward Current | I_F | 50 | 50 | mA |
| Peak Forward Current[1] | I_p | 1.2 | 1 | A |
| Reverse Voltage | V_R | 5 | 5 | V |
| Operating Temperature | T_{opr} | -40~ +85 | -40~ +85 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -40~ +85 | -40~ +85 | $^\circ\text{C}$ |
| Lead Solder Temperature [2] | 260 $^\circ\text{C}$ For 5 Seconds | | | |

Notes:

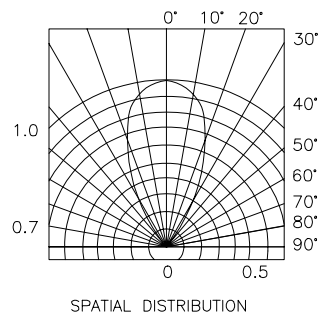
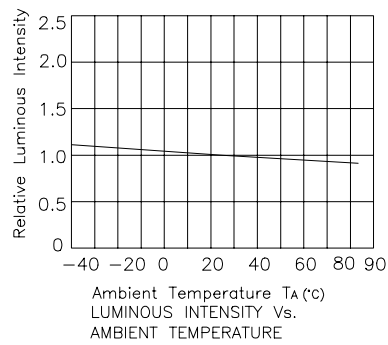
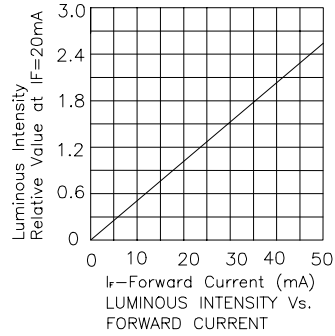
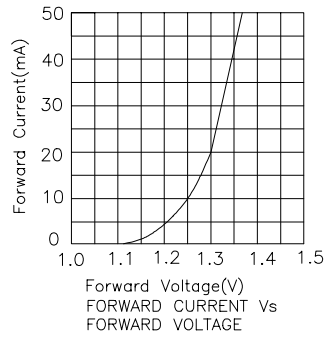
- 1/100 Duty Cycle, 10us Pulse Width.
2. 4mm below package base.



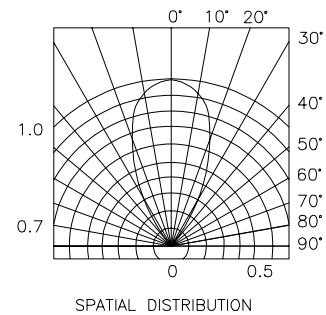
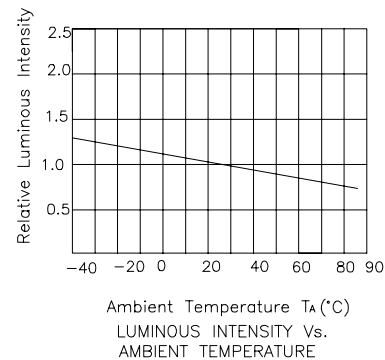
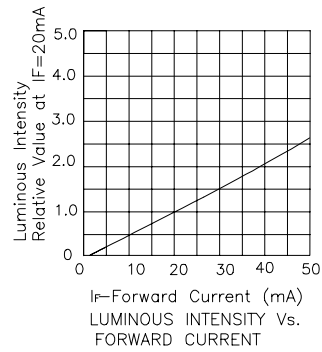
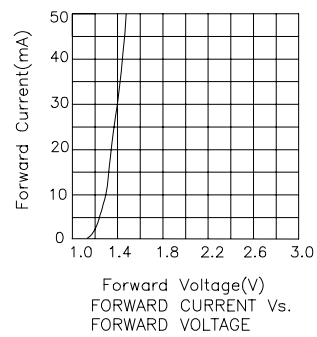
L-34F3C, L-34F3BT



L-34SF4C, L-34SF4BT



L-34SF6C, L-34SF6BT



L-34SF7C, L-34SF7BT

