

#### T-1 (3mm) INFRA-RED EMITTING DIODES

L34F3C L34F3BT L34SF4C L34SF4BT

#### **Features**

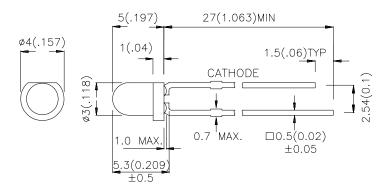
- •MECHANICALLY AND SPECTRALLY MATCHED TO THE L32P3C PHOTOTRANSISTOR.
- •BOTH WATER CLEAR LENS AND BLUE TRANSPARENT LENS AVAILABLE HIGH POWER OUTPUT.

#### **Description**

F3 Made with Gallium Arsenide Infrared Emitting diodes.

SF4 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

#### **Package Dimensions**



#### Notes

- All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25 (0.01\mbox{"})$  unless otherwise noted.
- 3. Lead spacing is measured where the lead emerge package.
- 4. Specifications are subject to change without notice.

DATE: OCT/29/2001 DRAWN:X.Q.ZHENG **PAGE: 1 OF 4** 



#### **Selection Guide**

Part No.	Dice	Lens Type	<b>Po (mW/sr)</b> @20mA		Po (mW/sr) @50mA		<b>Viewing</b> Angle
			Min.	Тур.	Min.	Тур.	201/2
L34F3C	GaAs	WATER CLEAR	2	10	5	20	50°
L34F3BT	GaAs	BLUE TRANSPARENT	2	5	8	20	50°
L34SF4C	GaAlAs	WATER CLEAR	2	10	5	20	50°
L34SF4BT	GaAlAs	BLUE TRANSPARENT	2	4	8	20	50°

#### Note:

# Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Item	P/N	Symbol	Тур.	Max.	Unit	Condition
Forward Voltage	F3 SF4	V <sub>F</sub>	1.2 1.3	1.5 1.7	V	IF=20mA
Reverse Current	F3 SF4	I <sub>R</sub>	-	10 10	uA	VR=5V
Junction Capacitance	F3 SF4	С	90 90	-	pF	V=0 f=1MHz
Peak Spectral Wavelength	F3 SF4	λР	940 880	-	nm	IF=20mA
Spectral Bandwidth	F3 SF4	Δλ	50 50	-	nm	IF=20mA

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

Item	Symbol	F3&SF4	Units
Power Dissipation	PT	100	mW
Forward Current	ļ <sub>F</sub>	50	mA
Peak Forward Current	l <sub>p</sub>	1.2	A
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	TA	-40~ +85	°C
Storage Temperature	Tstg	-40~ +85	°C

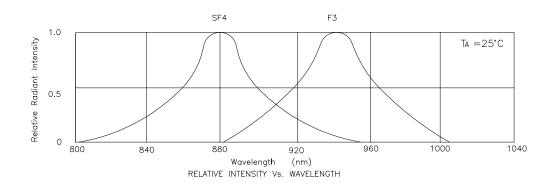
#### Notes

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 4mm below package base.

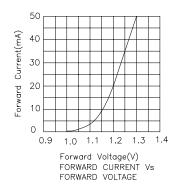
PAGE: 2 OF 4

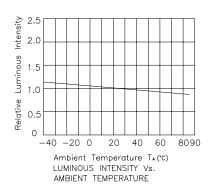
<sup>1.</sup>  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

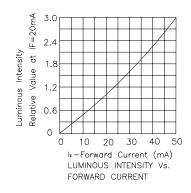


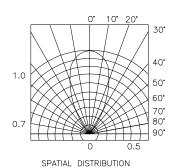


# L34F3C, L34F3BT









DATE: OCT/29/2001 DRAWN:X.Q.ZHENG PAGE: 3 OF 4

# Kingbright

# L34SF4C, L34SF4BT

