

L53F3C	L53F3BT
L53SF4C	L53SF4BT

Features

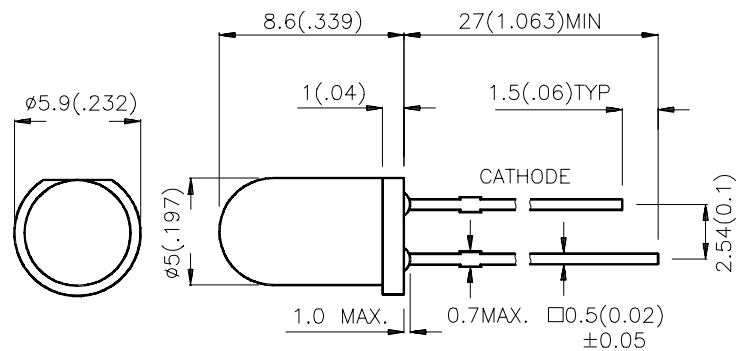
- MECHANICALLY AND SPECTRALLY MATCHED TO THE L51P3C PHOTOTRANSISTOR.
- BOTH WATER CLEAR LENS AND BLUE TRANSPARENT LENS AVAILABLE HIGH POWER OUTPUT.

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

SF4 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

Package Dimensions



Notes:

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.	θ1/2
L53F3C	GaAs	WATER CLEAR	8	20	12	30	30°
L53F3BT	GaAs	BLUE TRANSPARENT	5	20	8	30	30°
L53SF4C	GaAlAs	WATER CLEAR	8	20	12	30	30°
L53SF4BT	GaAlAs	BLUE TRANSPARENT	5	20	8	30	30°

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_A=25°C

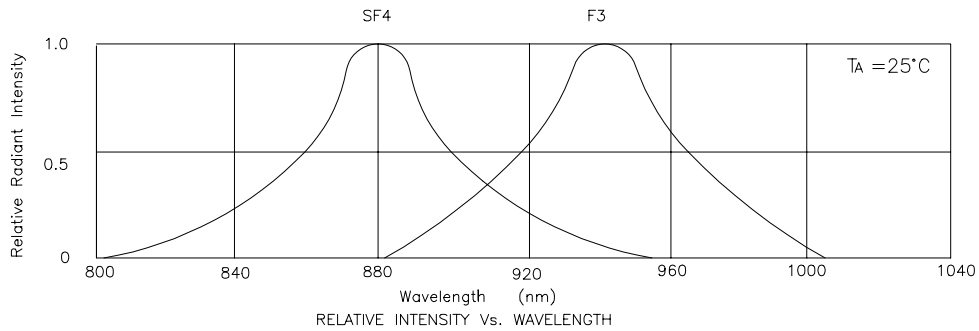
Item	P/N	Symbol	Typ.	Max.	Unit	Condition
Forward Voltage	F3 SF4	V _F	1.2 1.3	1.5 1.7	V	IF=20mA
Reverse Current	F3 SF4	I _R	-	10 10	μA	VR=5V
Junction Capacitance	F3 SF4	C	90 90	-	pF	V=0 f=1MHz
Peak Spectral Wavelength	F3 SF4	λ _P	940 880	-	nm	IF=20mA
Spectral Bandwidth	F3 SF4	Δλ	50 50	-	nm	IF=20mA

Absolute Maximum Ratings at T_A=25°C

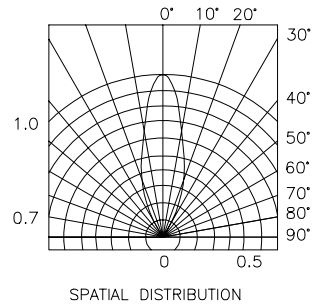
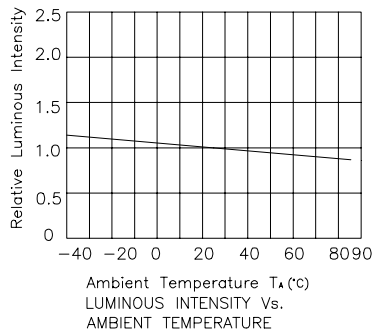
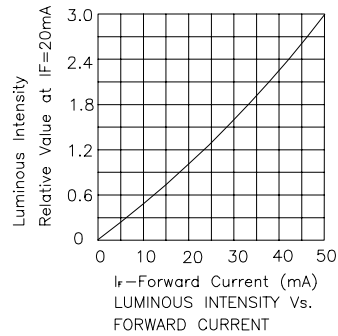
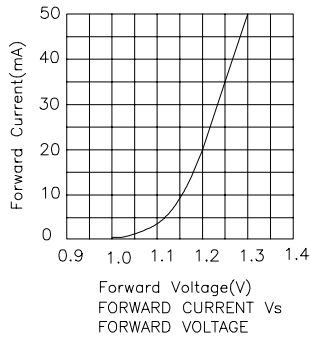
Item	Symbol	F3&SF4	Units
Power Dissipation	PT	100	mW
Forward Current	I _F	50	mA
Peak Forward Current	I _p	1.2	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _A	-40~ +85	°C
Storage Temperature	T _{stg}	-40~ +85	°C

Notes:

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



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