

Features

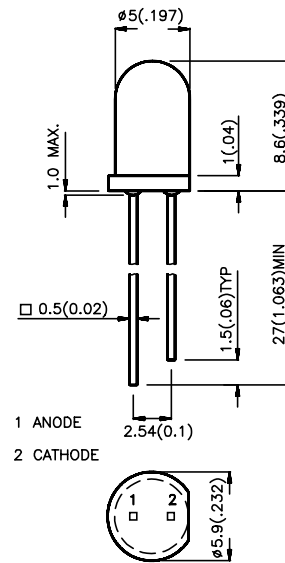
L53F3BT

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

Package Dimensions

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.



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 subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mW/sr) @20mA		Iv (mW/sr) @50mA		Viewing Angle
			Min.	Typ.	Min.	Typ.	
L53F3BT	GaAs	Blue Transparent	5	20	8	30	2 θ 1/2 30°

Note:

1. $\theta 1/2$ 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

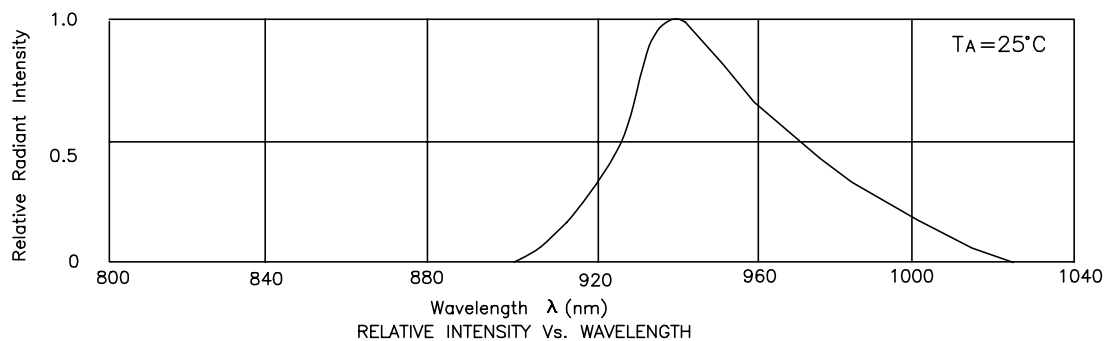
Item	P/N	Symbol	Typ.	Max.	Unit	Condition
Forward Voltage	F3	VF	1.2	1.5	V	IF=20mA
Reverse Current	F3	IR	-	10	uA	VR=5V
Junction Capacitance	F3	Co	90	-	pF	V=0 f=1MHz
Peak Spectral Wavelength	F3	IR	940	-	nm	IF=20mA
Spectral Bandwidth	F3	Δλ	50	-	nm	IF=20mA

Absolute Maximum Ratings at T_A=25°C

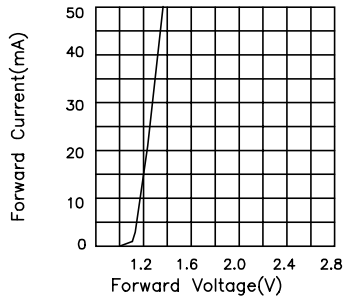
Item	Symbol	Maximum Rating	Units
Power Dissipation	Pd	100	mW
Forward Current	IF	50	mA
Peak Forward Current	I _p	1.2	A
Reverse Voltage	VR	5	V
Operating Temperature	Topr	-45~ +80	°C
Storage Temperature	Tstg	-45~ +80	°C

Notes:

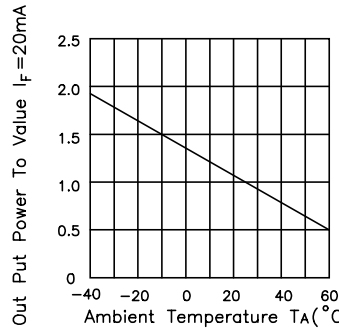
- 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



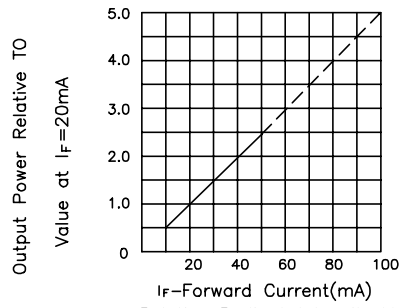
L53F3BT



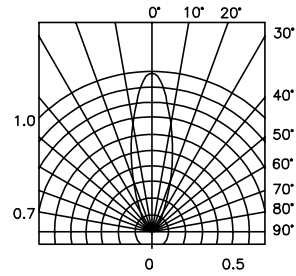
FORWARD CURRENT vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



Relative Radiant Intensity Vs. Forward Current



SPATIAL DISTRIBUTION