P/N: L-53F3BT

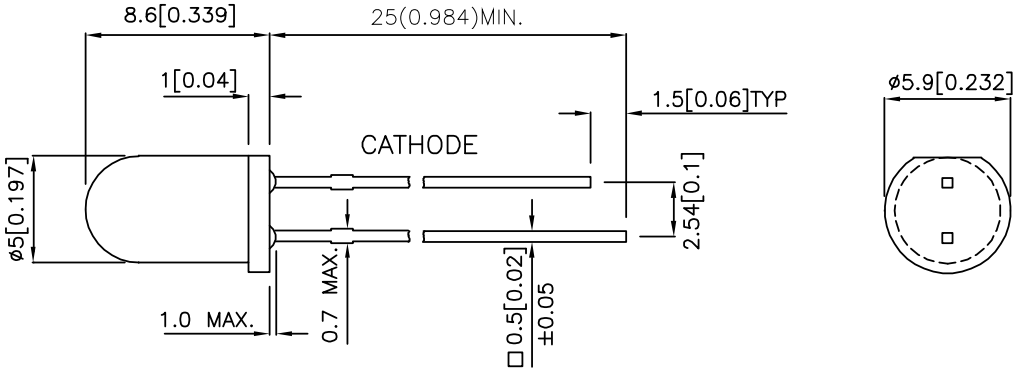
Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- BLUE TRANSPARENT LENS .
- RoHS COMPLIANT.

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Kingbright

Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) [2] @ 20mA*50mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
L-53F3BT	GaAs	BLUE TRANSPARENT	4	20	30°
			*7	*30	

Notes:
1.θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2.* Luminous intensity with asterisk is measured at 50mA. Radiant intensity / luminous flux: +/-15%.

Electrical / Optical Characteristics at T_A=25°C

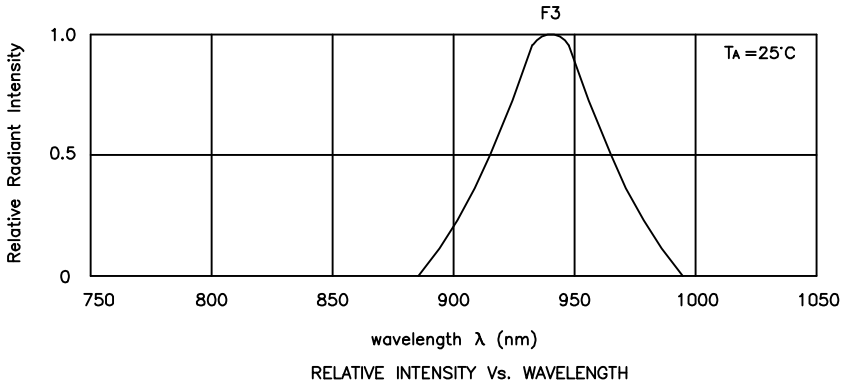
Item	P/N	Symbol	Typ.	Max.	Units	Test Conditions
Forward Voltage[1]	F3	V_F	1.2	1.6	V	I_F=20mA
Reverse Current	F3	I_R	-	10	uA	V_R=5V
Capacitance	F3	C	90	-	pF	V_F=0V;f=1MHz
Peak Spectral Wavelength	F3	λP	940	-	nm	I_F=20mA
Spectral Bandwidth	F3	Δλ1/2	50	-	nm	I_F=20mA

Note:
1. Forward Voltage: +/-0.1V

Absolute Maximum Ratings at T_A=25°C

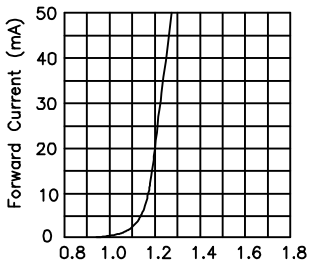
Parameter	Symbol	F3	Units
Power Dissipation	P_T	100	mW
DC Forward Current	I_F	50	mA
Peak Forward Current[1]	i_{FS}	1.2	A
Reverse Voltage	V_R	5	V
Operating Temperature	T_A	-40 To +85	°C
Storage Temperature	T_{STG}	-40 To +85	°C
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

Notes:
1. 1/100 Duty Cycle, 10us Pulse Width.
2. 2mm below package base.
3. 5mm below package base.

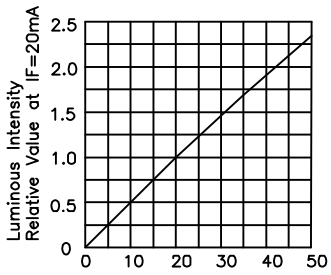


RELATIVE INTENSITY Vs. WAVELENGTH

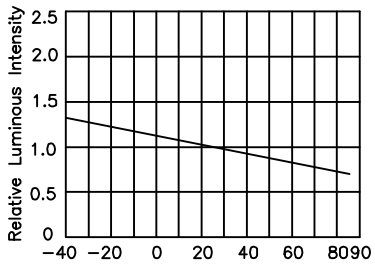
L-53F3BT



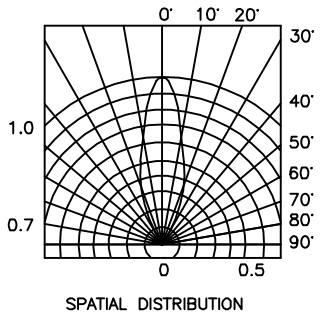
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION