P/N: L-7113SF4C

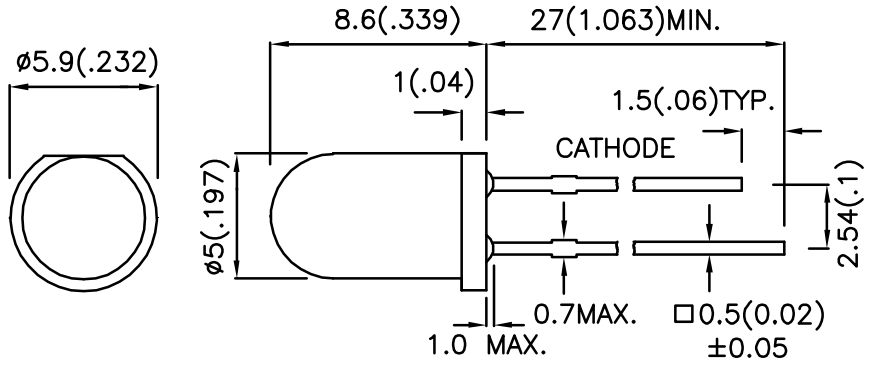
Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- RoHS COMPLIANT.

Description

SF4 Made with Gallium Aluminum 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.

Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) @ 20mA *50mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-7113SF4C	SF4 (GaAlAs)	WATER CLEAR	7	20	20°
			*10	*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.

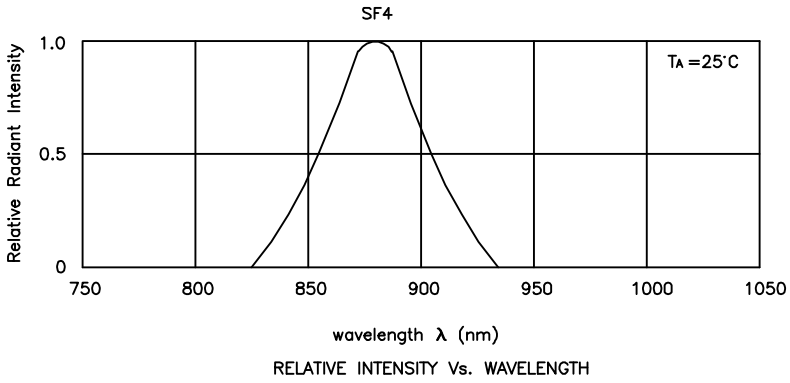
Electrical / Optical Characteristics at T_A=25°C

Parameter	P/N	Symbol	Typ.	Max.	Units	Test Conditions
Forward Voltage	SF4	V_F	1.3	1.6	V	I_F=20mA
Reverse Current	SF4	I_R	-	10	uA	V_R=5V
Capacitance	SF4	C	90	-	pF	V_F=0V;f=1MHz
Peak Spectral Wavelength	SF4	λP	880	-	nm	I_F=20mA
Spectral Bandwidth	SF4	Δλ1/2	50	-	nm	I_F=20mA

Absolute Maximum Ratings at T_A=25°C

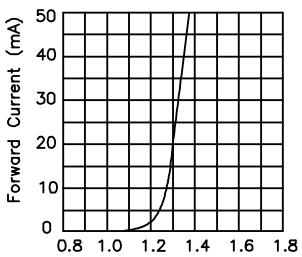
Parameter	Symbol	SF4	Units
Power Dissipation	P_T	100	mW
DC Forward Current	I_F	50	mA
Peak Forward Current[1]	i_{FS}	1.2	A
Reverse Voltage	V_R	5	V
Operating Temperature	T_A	-40 To +85	°C
Storage Temperature	T_{STG}	-40 To +85	°C
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

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

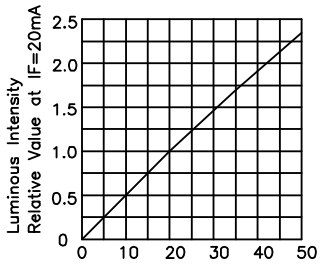


RELATIVE INTENSITY Vs. WAVELENGTH

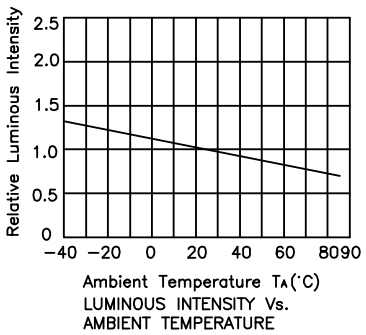
L-7113SF4C



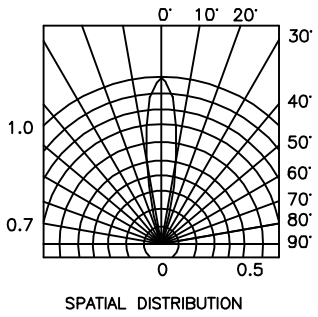
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Remarks:

If special sorting is required (e.g. binning based on forward voltage or radiant intensity/ luminous flux),

the typical accuracy of the sorting process is as follows:

1. Radiant Intensity/ Luminous Flux: +/-15%

2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.