

W53SF4C

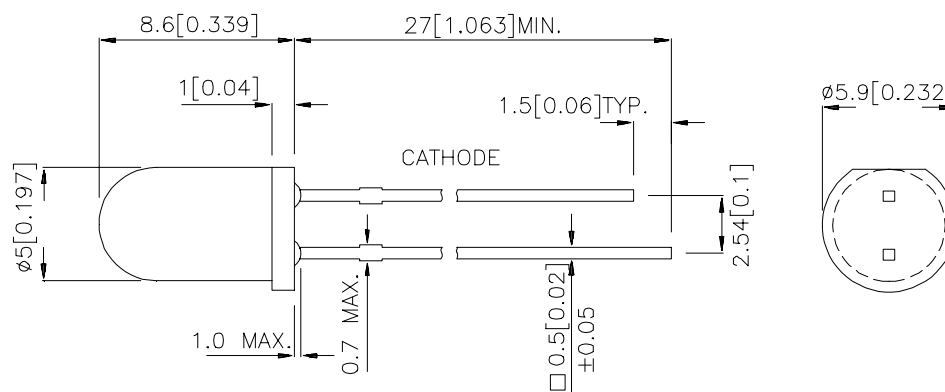
### Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE W51P3C PHOTOTRANSISTOR.
- WATER CLEAR LENS AVAILABLE HIGH POWER OUTPUT.

### Description

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) @ 20 mA *50mA		Viewing Angle
			Min.	Typ.	2θ1/2
W53SF4C	GaAlAs	WATER CLEAR	7	20	20°
			*10	*30	20°

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<sub>A</sub>=25°C

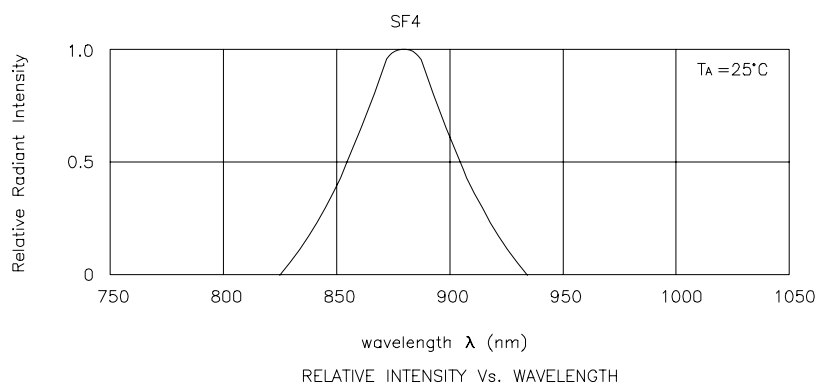
Parameter	P/N	Symbol	Typ.	Max.	Unit	Condition
Forward Voltage	SF4	V <sub>F</sub>	1.3	1.6	V	I <sub>F</sub> =20mA
Reverse Current	SF4	I <sub>R</sub>	-	10	uA	V <sub>R</sub> =5V
Capacitance	SF4	C	90	-	pF	V <sub>F</sub> =0V; f=1MHz
Wavelength at peak emission	SF4	λ <sub>P</sub>	880	-	nm	I <sub>F</sub> =20mA
Spectral line half-width	SF4	Δλ <sub>1/2</sub>	50	-	nm	I <sub>F</sub> =20mA

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

Item	Symbol	SF4	Units
Power Dissipation	P <sub>T</sub>	100	mW
Forward Current	I <sub>F</sub>	50	mA
Peak Forward Current[1]	i <sub>FS</sub>	1.2	A
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>A</sub>	-40~ +85	°C
Storage Temperature	T <sub>STG</sub>	-40~ +85	°C
Lead Solder Temperature[2]	260°C For 5 Seconds		

Notes:

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



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