

Kingbright

T-1 3/4 (5mm) INFRA-RED EMITTING DIODE

W53SF4BT

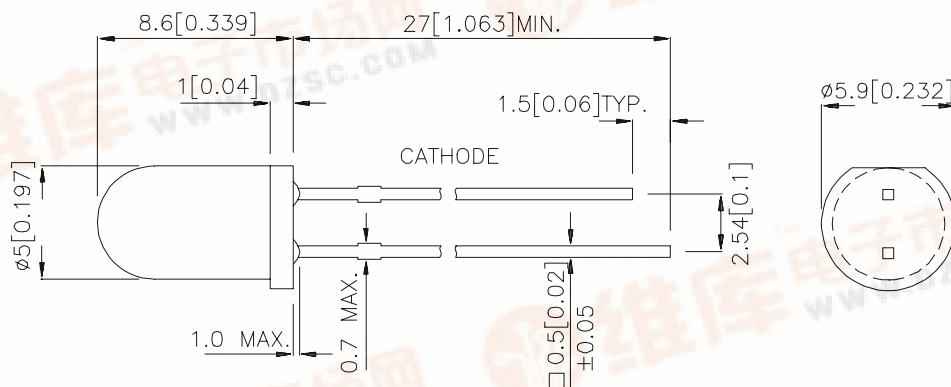
Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE W51P3C PHOTOTRANSISTOR.
- BOTH WATER CLEAR LENS AND BLUE TRANSPARENT LENS AVAILABLE

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 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.	2 θ 1/2
W53SF4BT	GaAlAs	BLUE TRANSPARENT	4	20	20°
			*7	*30	20°

Notes:

1. θ 1/2 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.	Unit	Condition
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
Wavelength at peak emission	SF4	λ P	880	-	nm	I _F =20mA
Spectral line half-width	SF4	$\Delta \lambda$ 1/2	50	-	nm	I _F =20mA

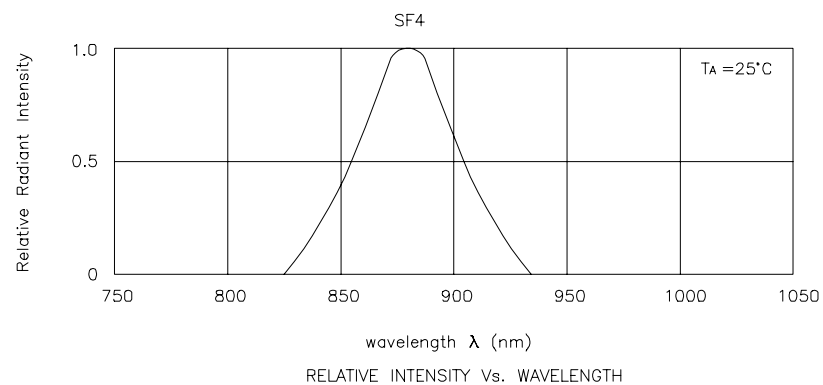
Absolute Maximum Ratings at T_A=25°C

Item	Symbol	SF4	Units
Power Dissipation	P _T	100	mW
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~ +85	°C
Storage Temperature	T _{STG}	-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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