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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Part Number: WP3A10SF7C

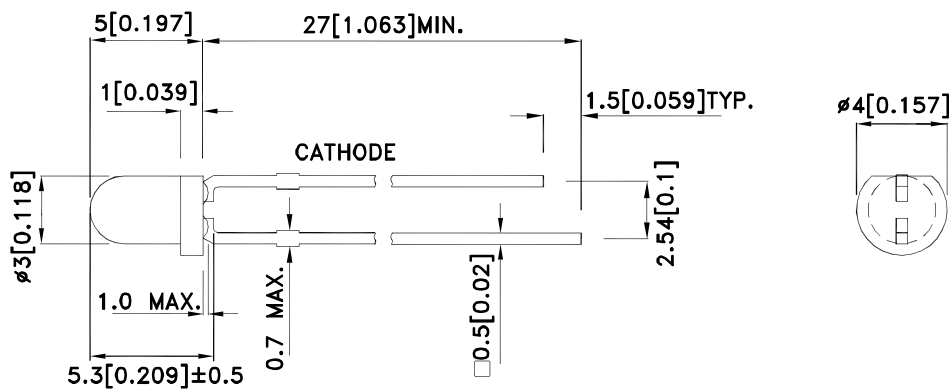
Features

- Mechanically and spectrally matched to the phototransistor.
- RoHS compliant.

Description

SF7 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 leads emerge from the package.
4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) [2] @ 20mA *50mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
WP3A10SF7C	SF7 (GaAlAs)	Water Clear	7	18	50°
			*10	*45	

Notes:

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

Electrical / Optical Characteristics at TA=25°C

Parameter	P/N	Symbol	Typ.	Max.	Units	Test Conditions
Forward Voltage [1]	SF7	V _F	1.4	1.6	V	I _F =20mA
Reverse Current	SF7	I _R		10	μA	V _R = 5V
Capacitance	SF7	C	30		pF	V _F =0V;f=1MHz
Peak Spectral Wavelength	SF7	λ _P	850		nm	I _F =20mA
Spectral Bandwidth	SF7	Δλ1/2	50		nm	I _F =20mA

Note:

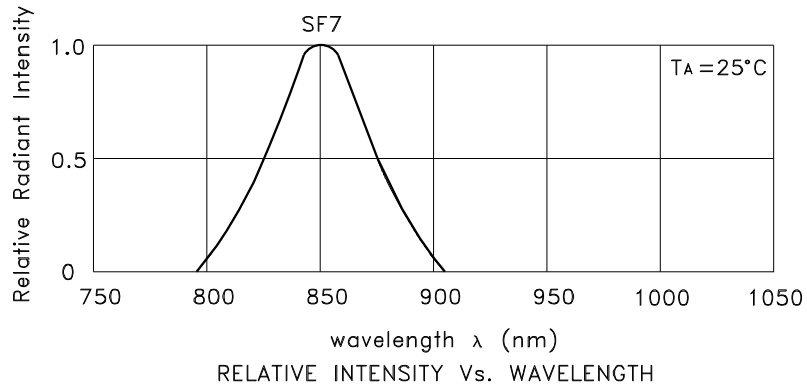
1. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

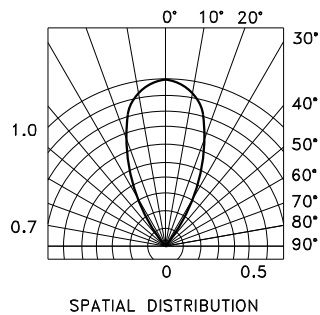
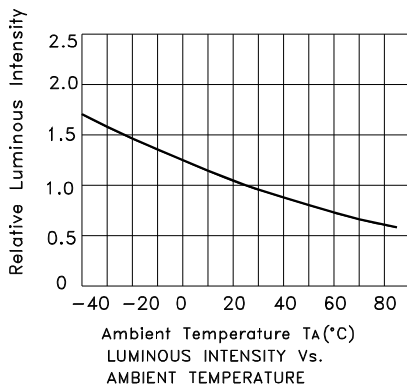
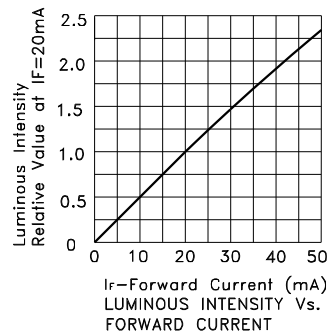
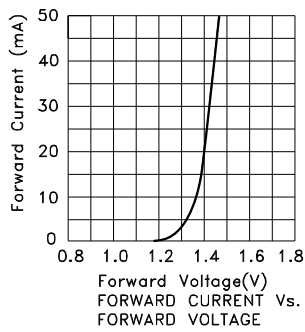
Parameter	Symbol	SF7	Units
Power dissipation	P _D	80	mW
DC Forward Current	I _F	50	mA
Peak Forward Current [1]	i _{FS}	1	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _A	-40 To +85	°C
Storage Temperature	T _{STG}	-40 To +85	°C
Lead Solder Temperature [2]		260°C For 3 Seconds	
Lead Solder Temperature [3]		260°C For 5 Seconds	

Notes:

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



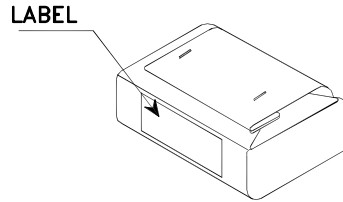
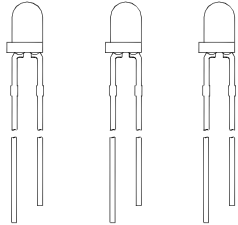
WP3A10SF7C



Kingbright

PACKING & LABEL SPECIFICATIONS

WP3A10SF7C

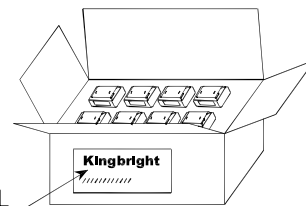


1,000PCS / BAG



56K / 9# BOX

OUTSIDE LABEL



OUTSIDE LABEL

28K / 5# BOX

Kingbright

P/NO: WP3A10XXX

QTY: 1,000 pcs

Q.C.



S/N: XXXX

CODE: XXX

LOT NO:



RoHS Compliant

LED MOUNTING METHOD

1. The lead pitch of the LED must match the pitch of the mounting holes on the PCB during component placement. Lead-forming may be required to insure the lead pitch matches the hole pitch. Refer to the figure below for proper lead forming procedures.

(Fig. 1)

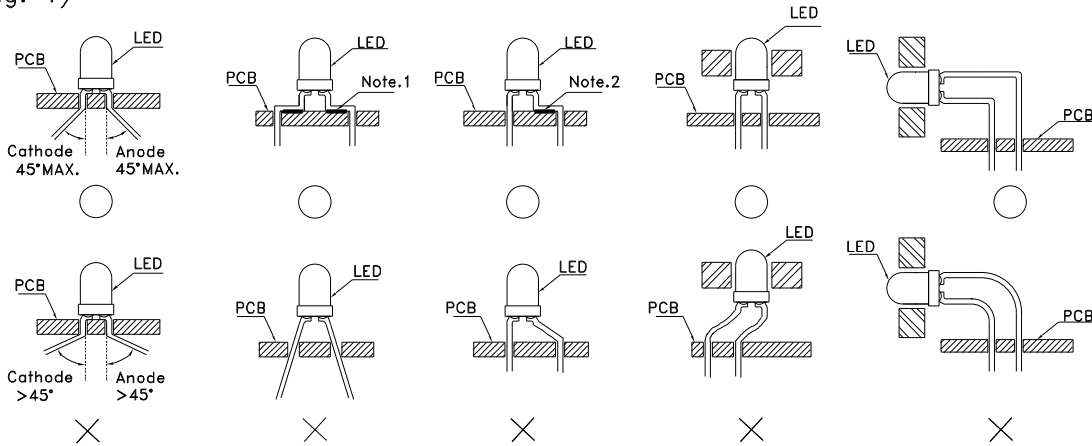


Fig.1

“○” Correct mounting method “×” Incorrect mounting method

Note 1-2 : Do not route PCB trace in the contact area between the leadframe and the PCB to prevent short-circuits.

2. When soldering wire to the LED, use individual heat-shrink tubing to insulate the exposed leads to prevent accidental contact short-circuit.

(Fig. 2)

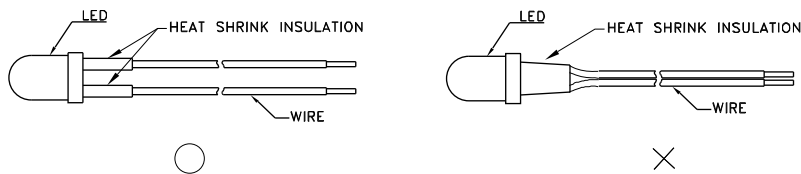


Fig. 2

3. Use stand-offs (Fig. 3) or spacers (Fig. 4) to securely position the LED above the PCB.

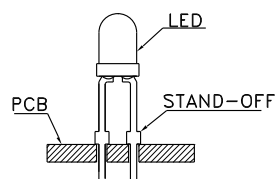


Fig. 3

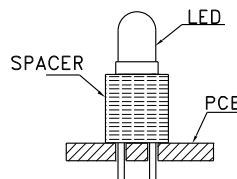


Fig. 4

LEAD FORMING PROCEDURES

1. Maintain a minimum of 2mm clearance between the base of the LED lens and the first lead bend. (Fig. 5 and 6)

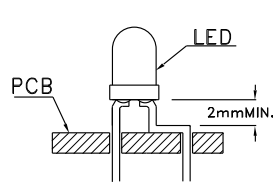


Fig. 5

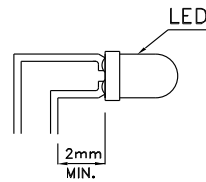


Fig. 6

2. Lead forming or bending must be performed before soldering, never during or after Soldering.
3. Do not stress the LED lens during lead-forming in order to fractures in the lens epoxy and damage the internal structures.
4. During lead forming, use tools or jigs to hold the leads securely so that the bending force will not be transmitted to the LED lens and its internal structures. Do not perform lead forming once the component has been mounted onto the PCB. (Fig. 7)
5. Do not bend the leads more than twice. (Fig. 8)

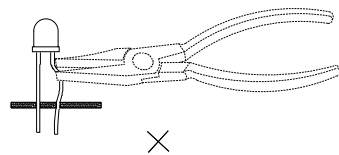


Fig. 7

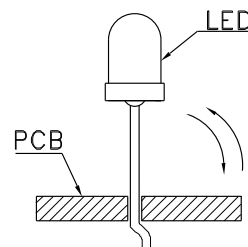


Fig. 8

6. After soldering or other high-temperature assembly, allow the LED to cool down to 50°C before applying outside force (Fig. 9). In general, avoid placing excess force on the LED to avoid damage. For any questions please consult with Kingbright representative for proper handling procedures.

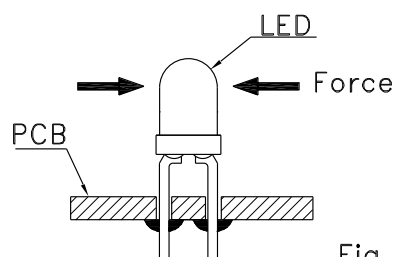


Fig. 9