3.5x2.8 mm INFRARED EMITTING DIODE

Part Number: AA3528SF4S-R

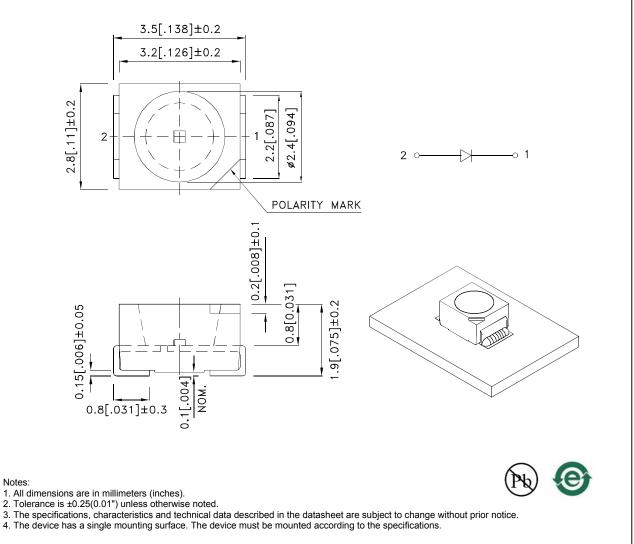
Features

- Mechanically and spectrally matched to the phototransistor.
- Package : 1500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

SF4 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

Package Dimensions

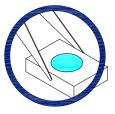


SPEC NO: DSAL0870 APPROVED: WYNEC REV NO: V.2 CHECKED: Allen Liu DATE: APR/09/2011 DRAWN: J.Yu PAGE: 1 OF 6 ERP: 1201007050

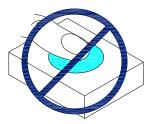
Handling Precautions

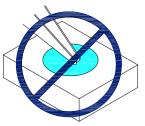
Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force. As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might lead to damage and premature failure of the LED.

1. Handle the component along the side surfaces by using forceps or appropriate tools.



2. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.



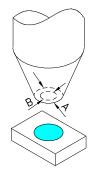


3. Do not stack together assembled PCBs containing exposed LEDs. Impact may scratch the silicone lens or damage the internal circuitry.



4.1. The outer diameter of the SMD pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible.

- 4.2. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.
- 4.3. The dimensions of the component must be accurately programmed in the pick-and-place machine to insure precise pickup and avoid damage during production.



5. As silicone encapsulation is permeable to gases, some corrosive substances such as H_2S might corrode silver plating of leadframe. Special care should be taken if an LED with silicone encapsulation is to be used near such substances.

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Selection Guide

Part No.	Dice	Long Tung	Po (mW/sr) [2] @ 20mA		Viewing Angle [1]
Part NO.	Dice	Lens Type	Min.	Тур.	201/2
AA3528SF4S-R	SF4 (GaAlAs)	Water Clear	1.2	2	120°

Notes: 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value. 2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

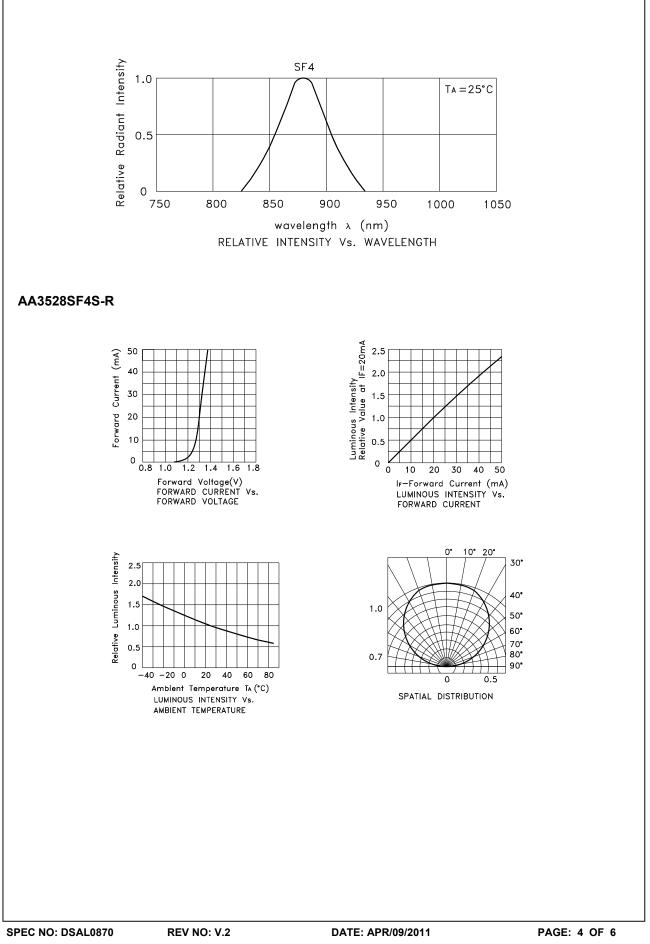
Parameter	P/N	Symbol	Тур.	Max.	Units	Test Conditions
Forward Voltage [1]	SF4	VF	1.3	1.6	V	I⊧=20mA
Reverse Current	SF4	lr		10	uA	VR = 5V
Capacitance	SF4	С	90		pF	VF=0V;f=1MHz
Peak Spectral Wavelength	SF4	λP	880		nm	I⊧=20mA
Spectral Bandwidth	SF4	Δλ1/2	50		nm	I⊧=20mA

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

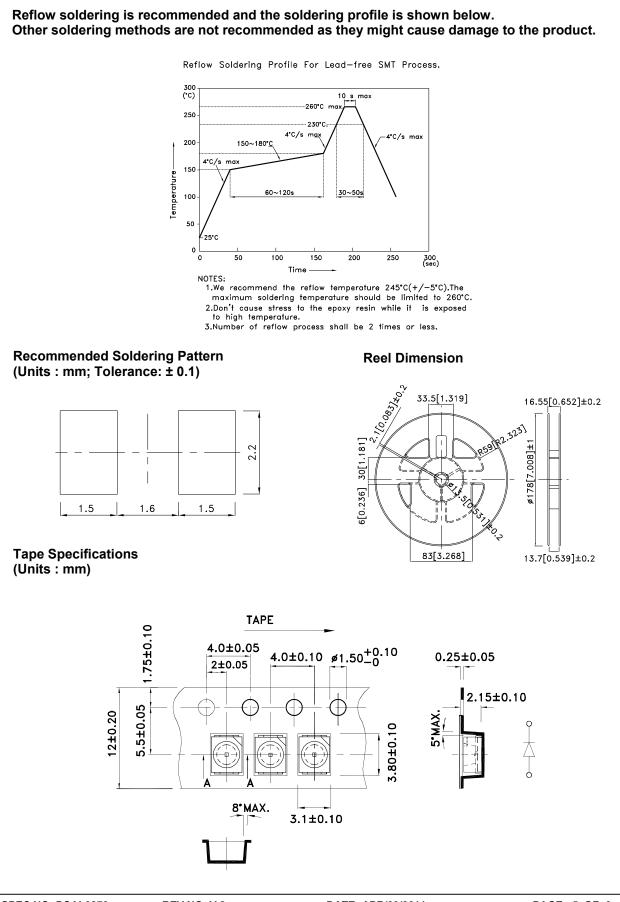
Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	SF4	Units
Power dissipation	Po	80	mW
DC Forward Current	lf	50	mA
Peak Forward Current [1]	İFS	1.2	А
Reverse Voltage	VR	5	V
Operating Temperature	Та	-40 To +85	°C
Storage Temperature	Тѕтс	-40 To +85	°C

Note: 1. 1/100 Duty Cycle, 10µs Pulse Width.



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