

SUBMINIATURE SOLID STATE LAMP

Part Number: AM2520EF/4SGD

Super Bright Green

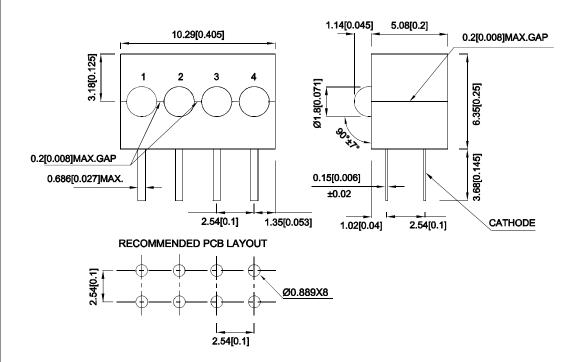
Features

- Black case enhances contrast.
- Vibration and shock resistant.
- Housing UL rating:94V-0.
- Housing material: type 66 nylon.
- RoHS compliant.

Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Package Dimensions



- 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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

SPEC NO: DSAD1640 **REV NO: V.9B** DATE: APR/08/2016 PAGE: 1 OF 5 APPROVED: Wynec ERP: 1102005299 **CHECKED: Allen Liu** DRAWN: M.Liu



Selection Guide

Part No.	Emitting Color (Material)	Emitting Color (Material) Lens Type lv (mcd) [2] @ 20mA		, - -	Viewing Angle [1]
		2.	Min.	Тур.	201/2
AM2520EF/4SGD	Super Bright Green (GaP)	Green Diffused	5	12	40°

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%.
- 3. Luminous intensity value is traceable to CIE127-2007 standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Green	565		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Green	568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Green	30		nm	IF=20mA
С	Capacitance	Super Bright Green	15		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Green	2.2	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Green		10	uA	V _R =5V

- Notes: 1. Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to CIE127-2007 standards.
- 4. Excess driving current and / or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

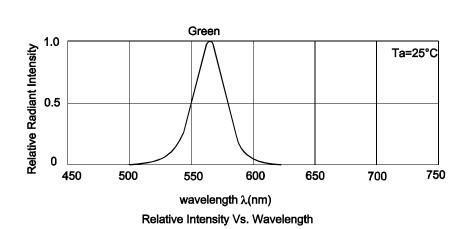
Absolute Maximum Ratings at TA=25°C

Parameter	Values	Units	
Power dissipation	62.5	mW	
DC Forward Current	25	mA	
Peak Forward Current [1]	140	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

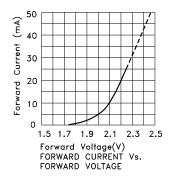
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.
- Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity Ref JEDEC/JESD625-A and JEDEC/J-STD-033.

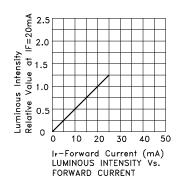
SPEC NO: DSAD1640 **REV NO: V.9B DATE: APR/08/2016** PAGE: 2 OF 5 APPROVED: Wynec **CHECKED: Allen Liu** DRAWN: M.Liu ERP: 1102005299

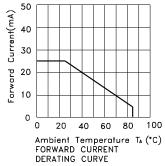
Kingbright

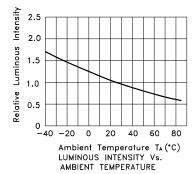


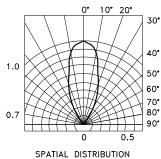
Super Bright Green AM2520EF/4SGD







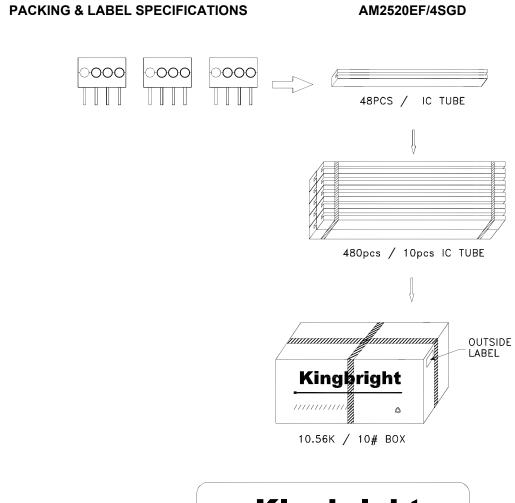


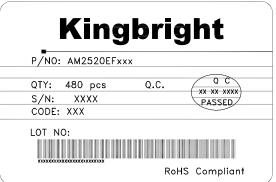


 SPEC NO: DSAD1640
 REV NO: V.9B
 DATE: APR/08/2016
 PAGE: 3 OF 5

 APPROVED: Wynec
 CHECKED: Allen Liu
 DRAWN: M.Liu
 ERP: 1102005299







Terms and conditions for the usage of this document

- 1. The information included in this document reflects representative usage scenarios and is intended for technical reference only.
- 2. The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
- 3. When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.
- 4. The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.
- 5. The contents and information of this document may not be reproduced or re-transmitted without permission by Kingbright.
- 6. All design applications should refer to Kingbright application notes available at http://www.KingbrightUSA.com/ApplicationNotes

 SPEC NO: DSAD1640
 REV NO: V.9B
 DATE: APR/08/2016
 PAGE: 4 OF 5

 APPROVED: Wynec
 CHECKED: Allen Liu
 DRAWN: M.Liu
 ERP: 1102005299