Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

Kingbright APED3528QBC/D-F01

For any questions, you can email us directly: sales@integrated-circuit.com



Distributor of Kingbright: Excellent Integrated System Limited

Datasheet of APED3528QBC/D-F01 - LED BLUE CLEAR 1411 SMD

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

Kingbright

3.5 x2.8mm SMD CHIP LED LAMP



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: APED3528QBC/D-F01 Blue

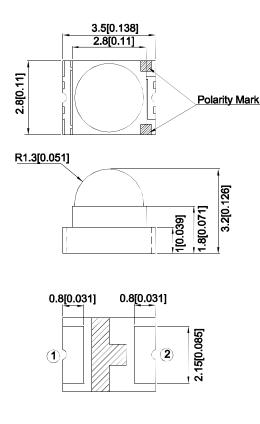
Features

- Single color.
- Suitable for all SMD assembly and solder process.
- Ideal for backlighting.
- Available on tape and reel.
- Package: 500pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

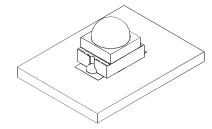
Descriptions

- The Blue source color devices are made with InGaN Light Emitting Diode.
- Electrostatic discharge and power surge could damage the LEDs.
- It is recommended to use a wrist band or antielectrostatic glove when handling the LEDs.
- All devices, equipments and machineries must be electrically grounded.

Package Dimensions







Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±0.2(0.008") unless otherwise noted.
- 3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice

4. The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAH3737 REV NO: V.5B DATE: NOV/04/2015 PAGE: 1 OF 5



Distributor of Kingbright: Excellent Integrated System Limited

Datasheet of APED3528QBC/D-F01 - LED BLUE CLEAR 1411 SMD

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

Kingbright

Selection Guide

Part No.	Emitting Color (Material)	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
		2.	Min.	Тур.	201/2
APED3528QBC/D-F01	Blue (InGaN)	Water Clear	300	400	40°

- 1.01/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- 2.Luminous intensity/ luminous Flux: +/-15%.
- ${\it 3.} Luminous\ intensit \dot{y}\ value\ is\ traceable\ to\ the\ CIE127-2007\ compliant\ national\ standards.$

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Emitting Color	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Blue	460		nm	IF=20mA
λD [1]	Dominant Wavelength	Blue	465		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Blue	25		nm	IF=20mA
С	Capacitance	Blue	100		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Blue	3.3	4	V	IF=20mA
lr	Reverse Current	Blue		50	uA	V _R =5V

Notes:

- 1.Wavelength: +/-1nm. 2.Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national 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

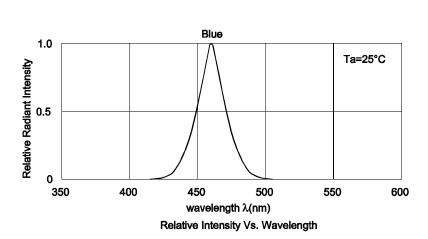
Parameter	Values	Units	
Power dissipation	120	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	150	mA	
Electrostatic Discharge Threshold (HBM)	250	V	
Reverse Voltage	5	V	
Operating Temperature	-40°C To +85°C		
Storage Temperature -40°C To +85°C			

SPEC NO: DSAH3737 **REV NO: V.5B** DATE: NOV/04/2015 PAGE: 2 OF 5

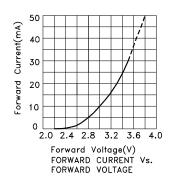
^{1.1/10} Duty Cycle, 0.1ms Pulse Width.

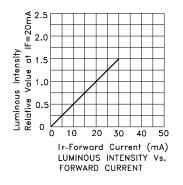


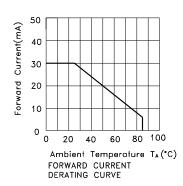
Kingbright

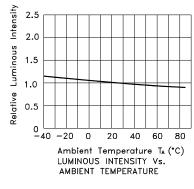


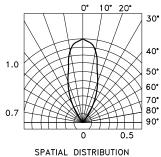
Blue APED3528QBC/D-F01











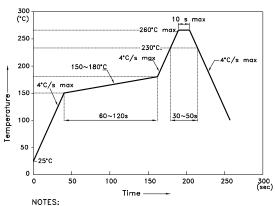
SPEC NO: DSAH3737 REV NO: V.5B DATE: NOV/04/2015 PAGE: 3 OF 5

Kingbright

APED3528QBC/D-F01

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.



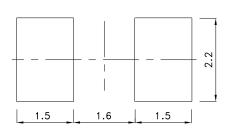
Oles:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.

2. Don't cause stress to the epoxy resin while it is exposed to high temperature.

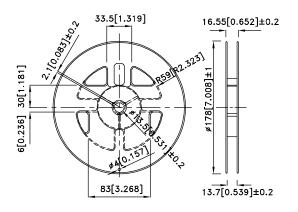
3. Number of reflow process shall be 2 times or less.

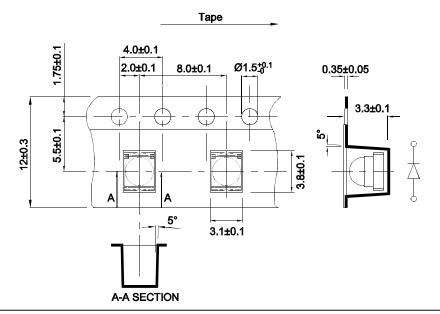
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Tape Dimensions (Units : mm)

Reel Dimension





SPEC NO: DSAH3737 REV NO: V.5B DATE: NOV/04/2015 PAGE: 4 OF 5

Distributor of Kingbright: Excellent Integrated System Limited

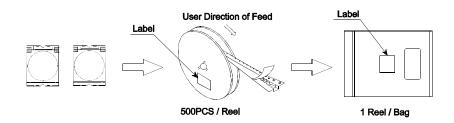
Datasheet of APED3528QBC/D-F01 - LED BLUE CLEAR 1411 SMD

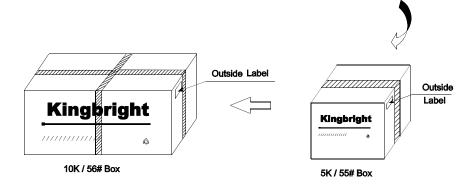
Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

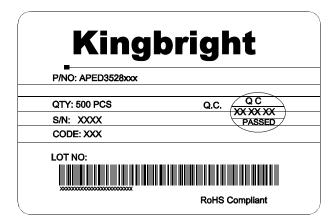
Kingbright

PACKING & LABEL SPECIFICATIONS

APED3528QBC/D-F01







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: DSAH3737 REV NO: V.5B DATE: NOV/04/2015 PAGE: 5 OF 5