Bridgelux® Solderless Holder

Product Data Sheet DS1340

Introduction

Bridgelux Solderless Holder Assemblies provide ultimate convenience for simple and reliable solderless connections to Bridgelux's LED Arrays.

Bridgelux Solderless Holder is a revolutionary light source system that integrates Bridgelux's V series COB technology with poke-in connectivity enabling solder-free installation. Bridgelux Solderless Holder and LED light sources streamline assembly processes, lower manufacturing cost, simplify luminaire design, improve light quality and increase design flexibility.

The harness system provides fast and solderless connections to V series LED arrays which greatly improves production throughput and minimizes possible connection related defect and damage.

Features

- Vertical snap-to-mate connection
- Positive-lock latching feature
- Gold-plated contacts
- Halogen-free UL94V-0

Benefits

- Minimizes handling of arrays during installation, greatly reducing the possibility of damage.
- Enables a fast, easy and reliable holder to the LED array
- Provides a slim design for space-limited applications. Minimizes risk of affecting light output
- Highly reliable, low contact resistance
- Meets RoHS requirements and is UL-flammability rated
- Provides design flexibility

Contents
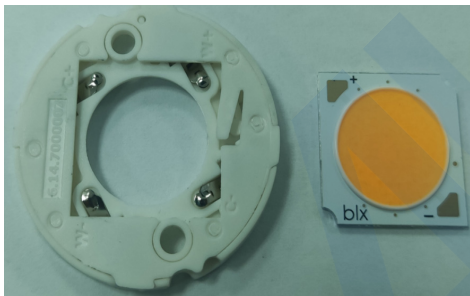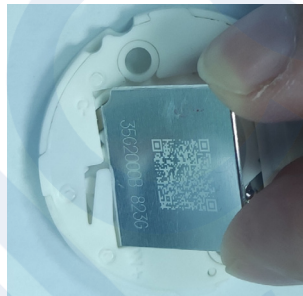
Product Feature Map

Bridgelux Solderless Holder is available in four different light emitting surface (LES) configurations—BXHD-1212, BXHD-1313, BXHD-1616 and BXHD-1919 -- and includes several features to simplify the design integration and manufacturing process.
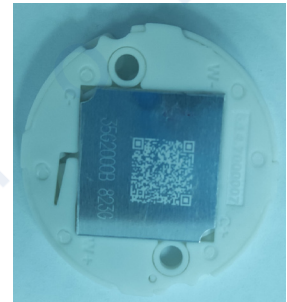

Easy Two-Step Assembly Process

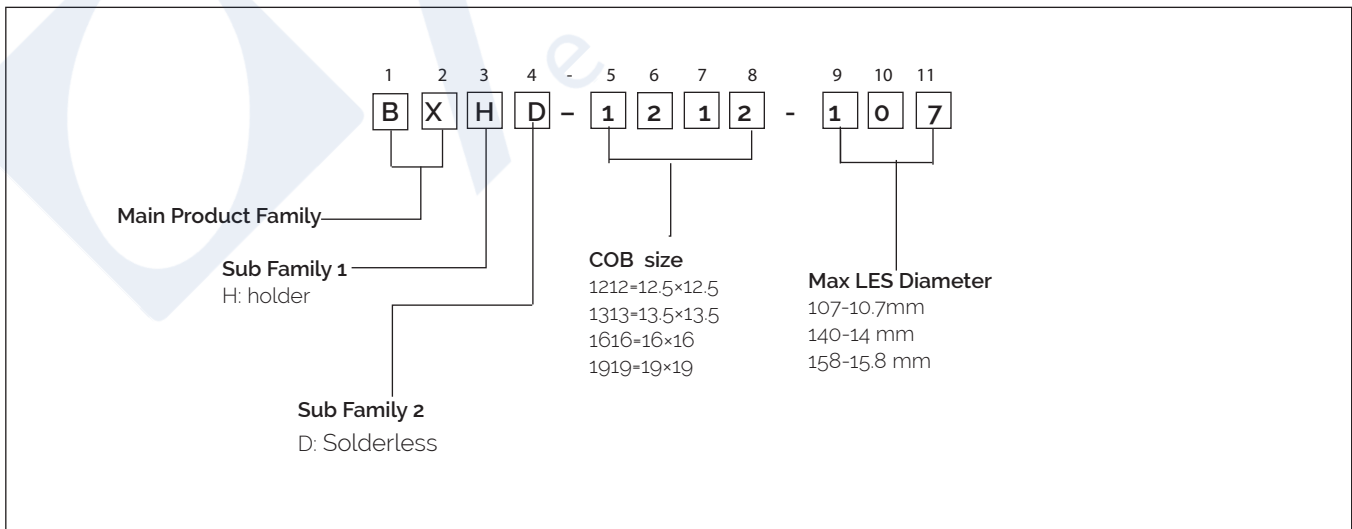Step 1. Check the positive contact.

Step 2. Align the gap and push straight down to holder

Completed Array and holder (shown backside)

Product Nomenclature

The part number designation for Bridgelux Solderless Holder Assemblies is explained as follows.

1	2	3	4		5	6	7	8		9	10	11
B	X	H	D	–	1	2	1	2	–	1	0	7

Main Product Family

Sub Family 1
H: holder

Sub Family 2
D: Solderless

COB size
1212=12.5×12.5
1313=13.5×13.5
1616=16×16
1919=19×19

Max LES Diameter
107-10.7mm
140-14 mm
158-15.8 mm

Product Selection Guide

The following product configurations are available:

Table 1: Selection Guide

Bridgelux Part Number	Array Size (mm x mm)	Max LES (mm)	Bridgelux arrays
BXHD-1212-107	12.5 x 12.5	10.7	V6,V8,V3HD,V4HD,NTW6 etc.
BXHD-1313-107	13.5 x 13.5	10.7	V10,V6HD etc.
BXHD-1616-140	15.8 x 15.8	14	TW9 etc.
BXHD-1919-158	19 x 19	15.8	V13,V9HD etc.

Notes for Table 1:
1. Additional holder designs can be requested. Consult sales for more information.

**Table 2:** List of suitable conductor types, wire sizes and maximum insulation diameter

Conductor Type	Wire Size	Insulation Diameter (mm)
Solid,Stranded and tinned,or Stranded	AWG22	2.1mm maximum
	AWG20	
	AWG18	
	0.34mm^2	
	0.50mm^2	
	0.75mm^2	

Notes for Table 2:
1. Additional holder designs can be requested. Consult Sales for more information

Mechanical Dimensions
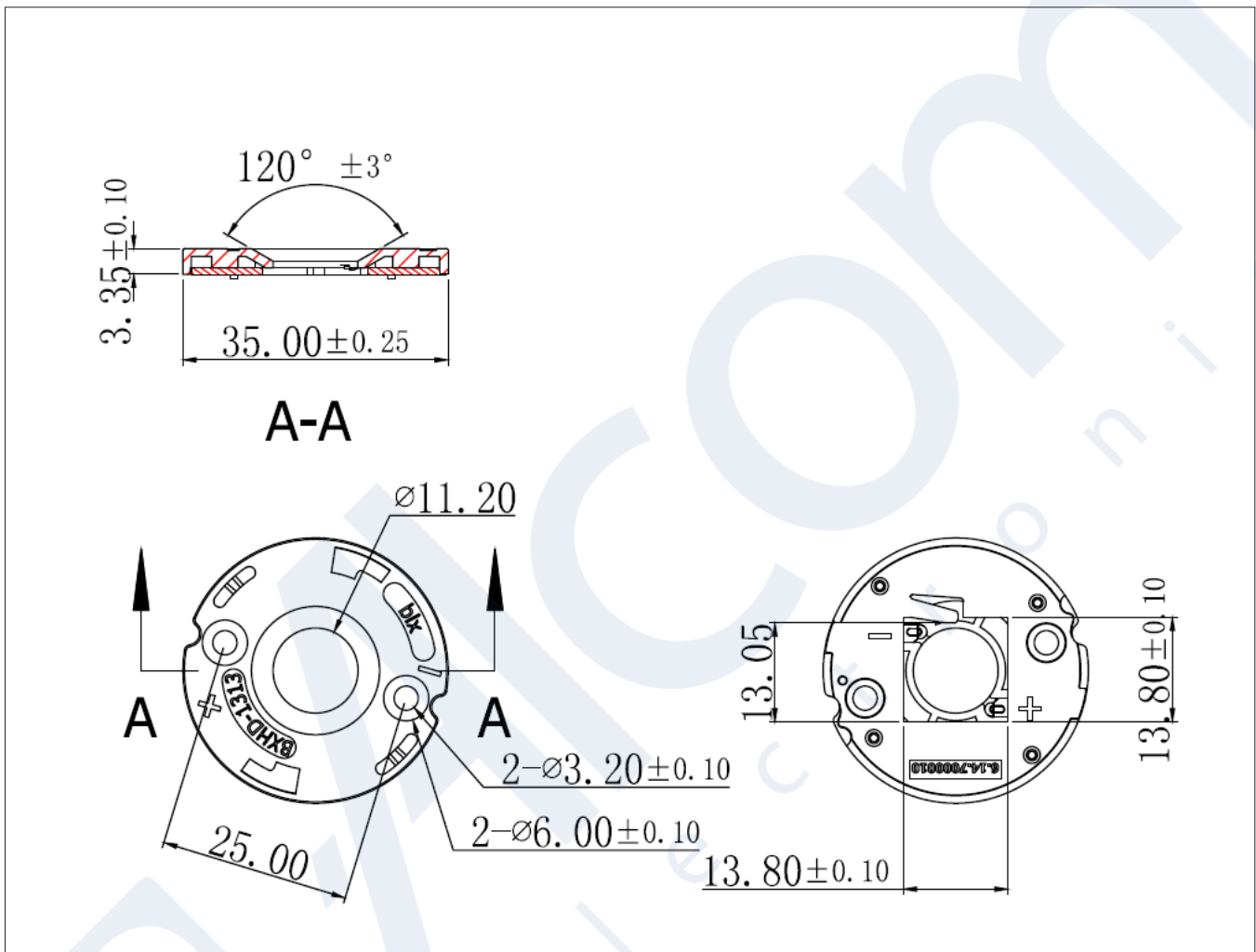
Figure 1: Drawing for BXHD-1212 holder
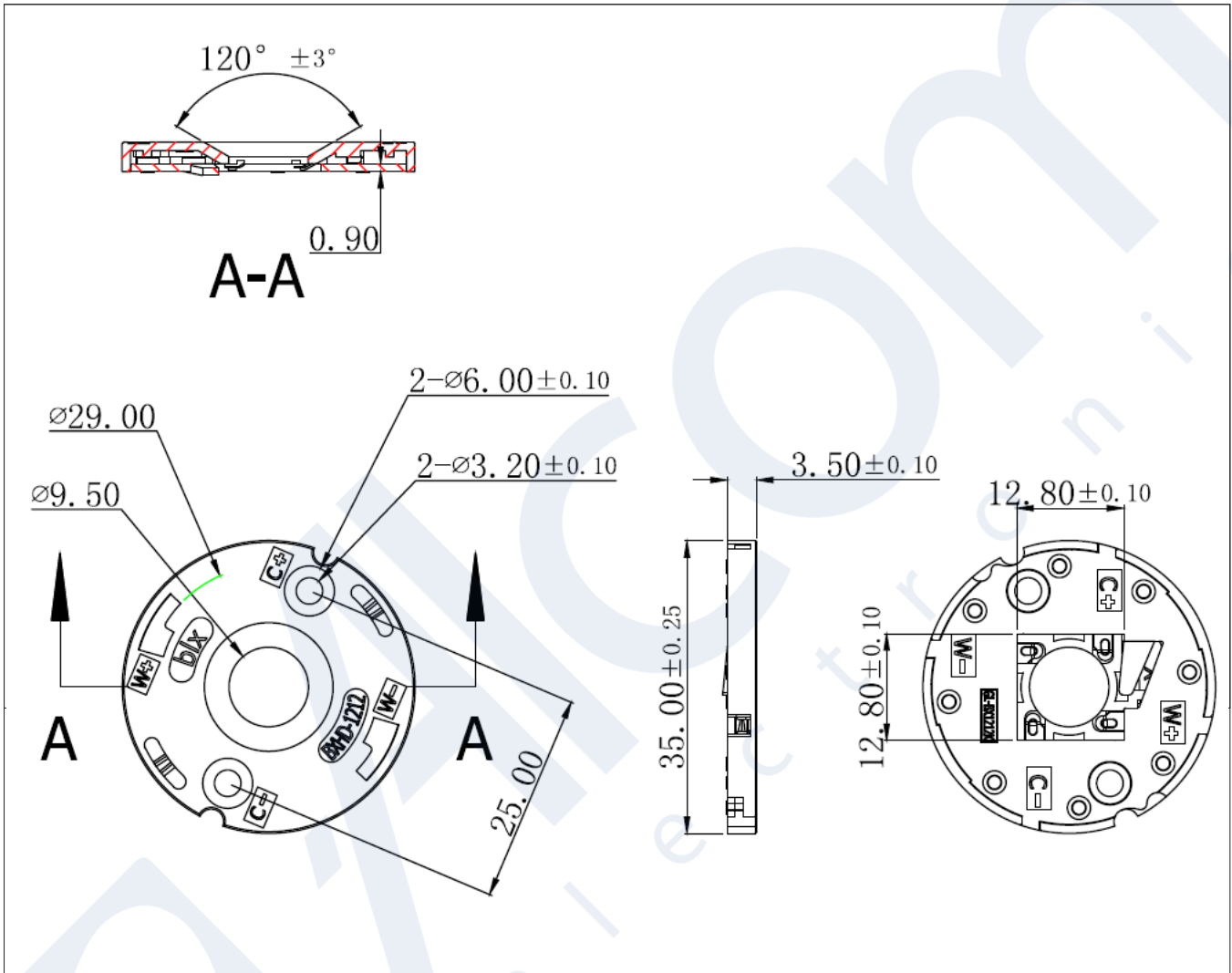
Notes for Figure 1:

1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are ±0.15 mm.
4. Solder pad labeled "+" denotes positive contact.
5. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

Mechanical Dimensions

Figure 2: Drawing for BXHD-1313 holder

Notes for Figure 2:
1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are ±0.15 mm.
4. Solder pad labeled "+" denotes positive contact.
5. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

Mechanical Dimensions
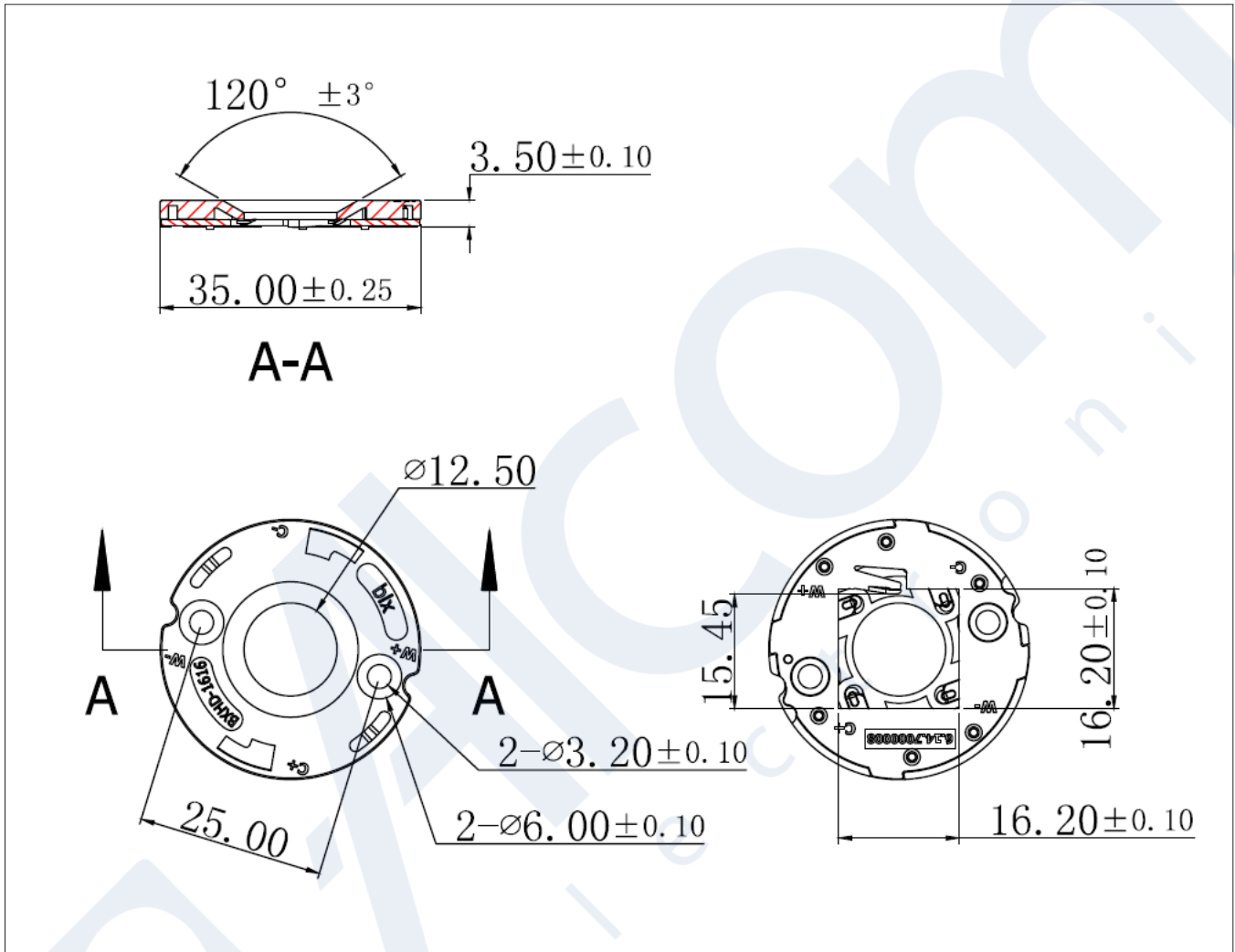
Figure 3: **Drawing for BXHD-1616 holder**

Notes for Figure 3:

1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are ±0.15 mm.
4. Solder pad labeled "+" denotes positive contact.
5. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

Mechanical Dimensions
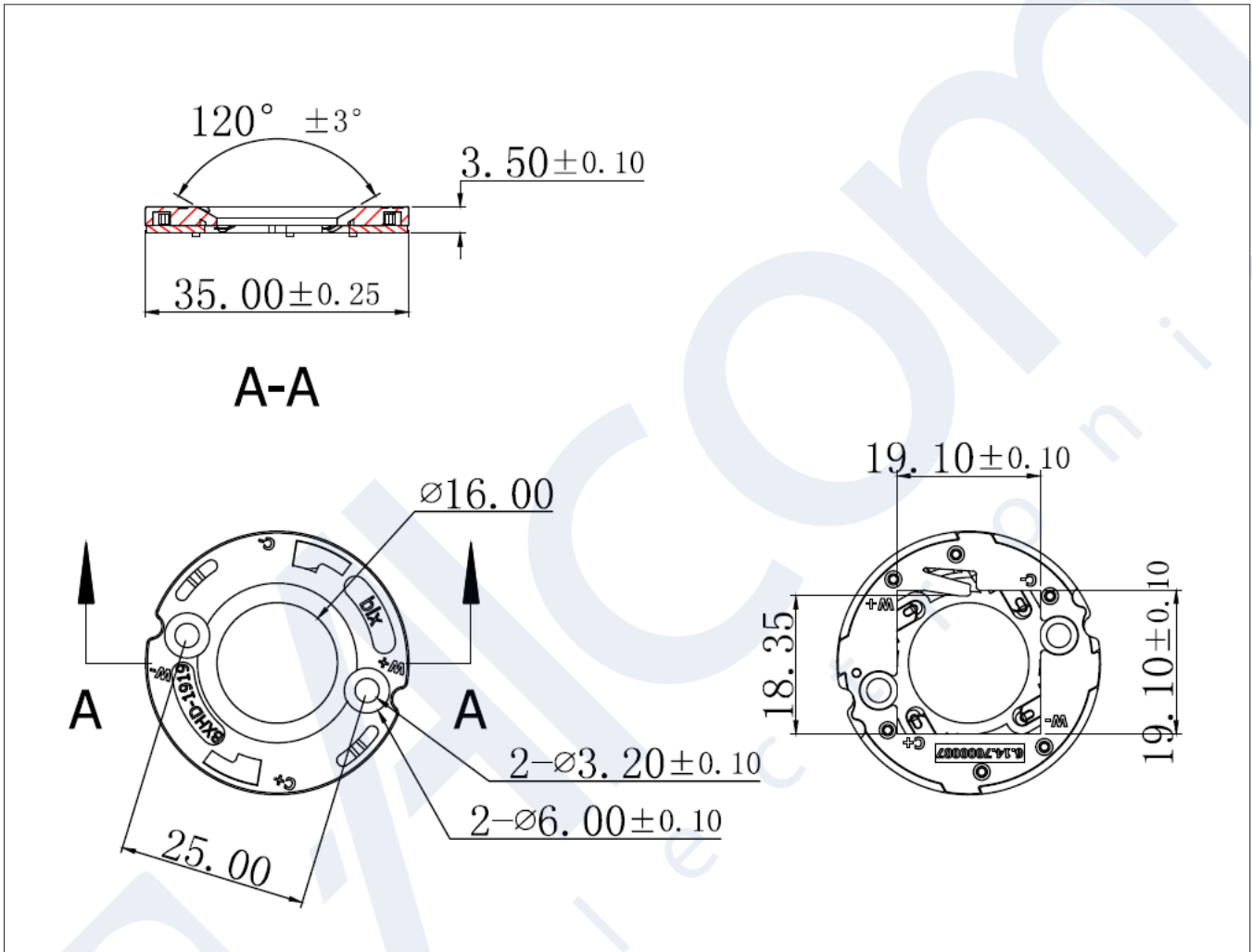
Figure 4: Drawing for BXHD-1919 holder

Notes for Figure 4:
1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are ±0.15 mm.
4. Solder pad labeled "+" denotes positive contact.
5. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

Product Specifications

Reference Information

Packaging: Bags inside box

UL File NO.:

Integral holder on Bridgelux V series LED Array

Refer to Application Notes AN120 for product handling, mounting and heat sink recommendations.

Fire rating : V0

RoHS: Yes

Electrical

Voltage (max.): 72V

Current (max.):3.6A

Design Resources

Application Notes

Bridgelux has developed a comprehensive set of application notes and design resources to assist customers in successfully designing with the V series product family of LED array products. For all available application notes visit www.bridgelux.com.

Disclaimers

MINOR PRODUCT CHANGE POLICY

The rigorous qualification testing on products offered by Bridgelux provides performance assurance. Slight cosmetic changes that do not affect form, fit, or function may occur as Bridgelux continues product optimization.

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