

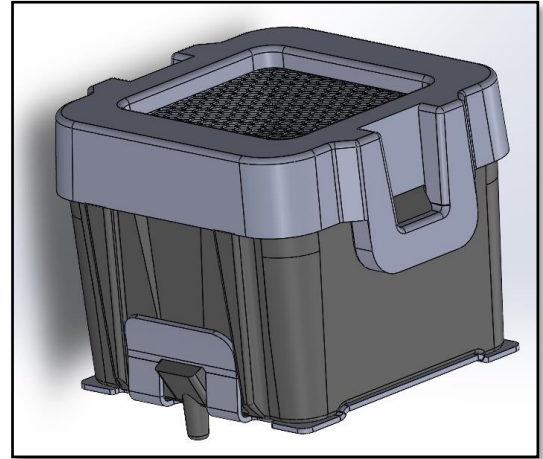
CoreLED P/N 13115 (Assembly)

Sub-components

- Clip P/N 13010
- Lens P/N 13111 (Prototype)
- Housing P/N 13112 (Prototype)

Additional components (not included)

- Cap P/N 13113 (Sold separately)
- MLA (Sold separately)



Product Description:

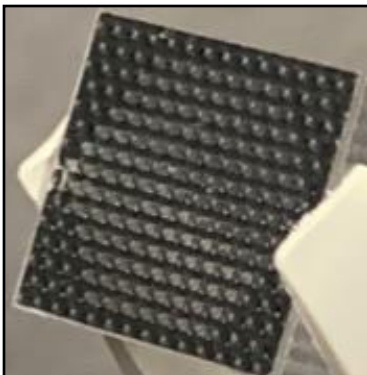
Surface mountable submodule designed for Single MLA (Micro Lens Array).

Submodule is comprised of a metal clip for PCB attachment, collimating bi-convex lens and a housing.

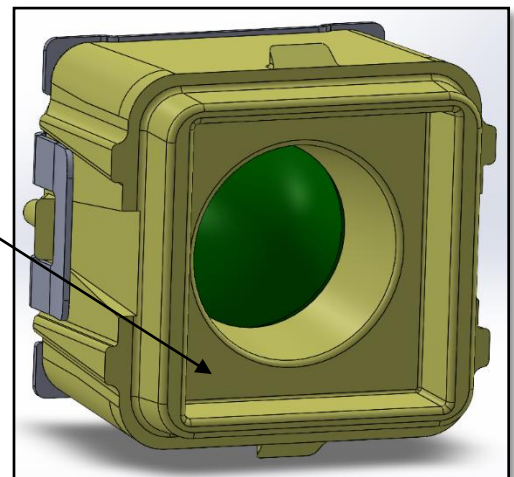
- A separate cap to retain MLA is sold separately.
- MLA is also sold separately.

Key Features:

- Collimating optics designed to work with Osram OSIRE[®] E3323 RGB
- Other LEDs can be analyzed for fit & performance upon request from CoreLED
- Supplied in tape and reel
- Precision alignment (within $\pm 0.2\text{mm}$)
- Standard pick and place equipment



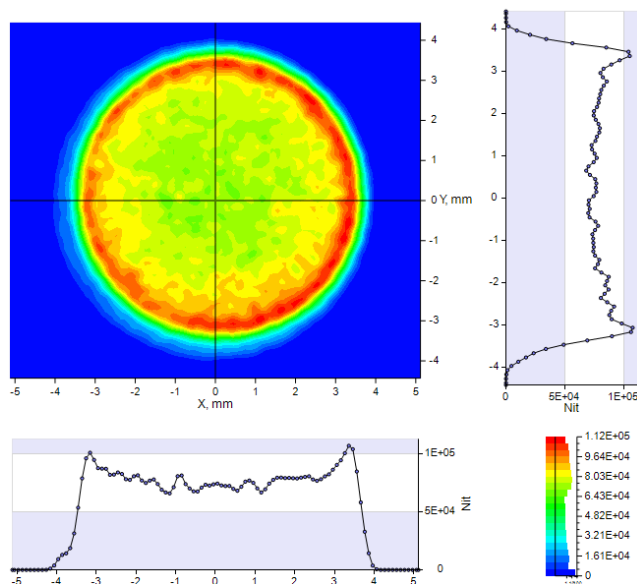
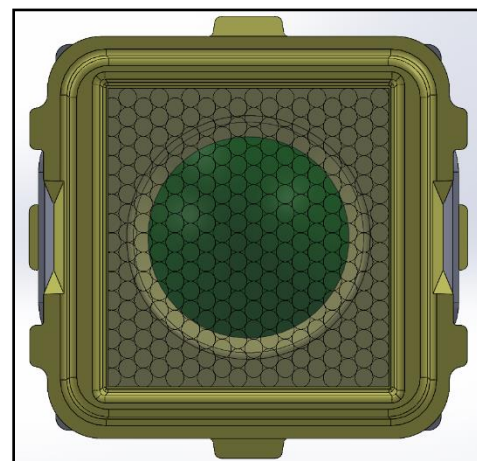
MLA placed here



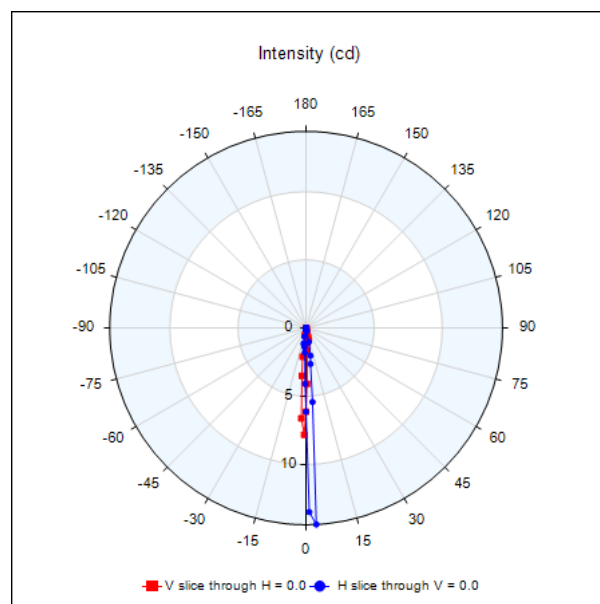
Simulation: Pattern Profile from Inner Lens Osram OSIRE[®] E3323 Blue

CHARACTERISTICS

IES NEMA Type	0H x 0V
Maximum Candela	27
Maximum Candela Angle	-1.0H 1.0V
Horizontal Beam Angle (50%)	2.9
Vertical Beam Angle (50%)	4.0
Horizontal Field Angle (10%)	9.1
Vertical Field Angle (10%)	9.7
Total Rated Lamp Lumens	1
Total Efficiency	52.11%



Spatial Luminance on MLA (nits)



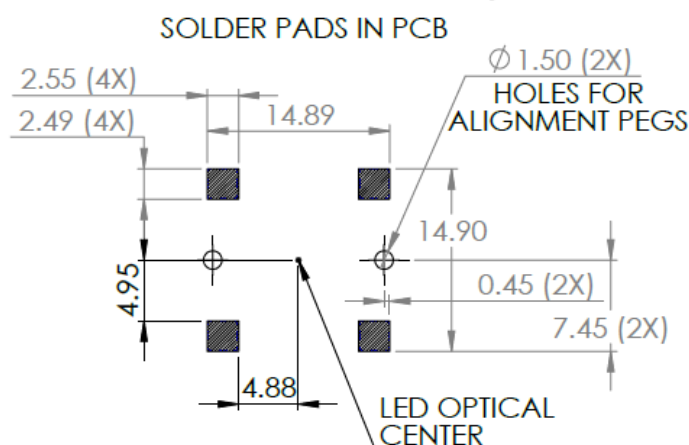
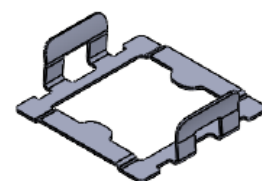
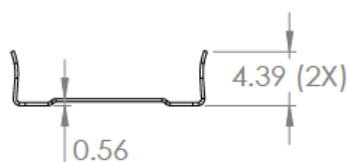
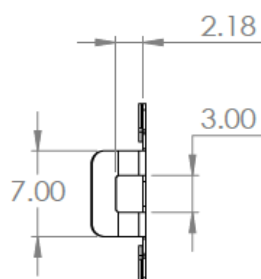
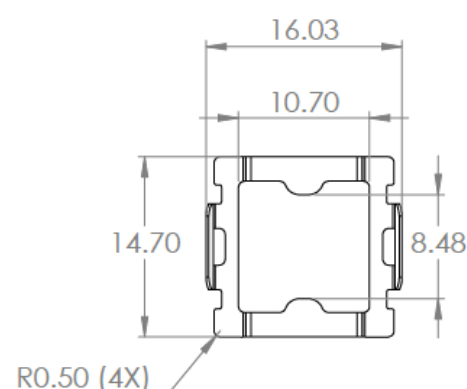
Intensity (cd)



Single MLA
Sub-Module
Datasheet
10/3/24

IES files and Raytrace models are available upon request from CoreLed Engineering.

Mechanical Profile: Solder Clip



NOTES:

1. MATERIAL: 0.254mm (0.010") THICK 510 H08 TEMPER PHOSPHOR BRONZE
2. PLATING: 5.0 MICRONS MINIMUM SOLDERABLE Sn OVER Cu FLASH, PRE PLATED
3. ALL TOLERANCES +/- 0.25 mm AND +/- 1 DEGREE UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MILLIMETERS		B. WELLS	07/01/24
TOLERANCES:			
FRACTIONAL ±		CHECKED	
ANGULAR: MACH ± BEND ±		ENG APPR.	
TWO PLACE DECIMAL ±		MFG APPR.	
THREE PLACE DECIMAL ±		Q.A.	
INTERPRET GEOMETRIC TOLERANCING PER:		COMMENTS:	
MATERIAL			
510 H08 TEMPER PHOSPHOR BRONZE PRE			
TIN PLATED			
FINISH			
DO NOT SCALE DRAWING			

CoreLed Systems, LLC

TITLE:

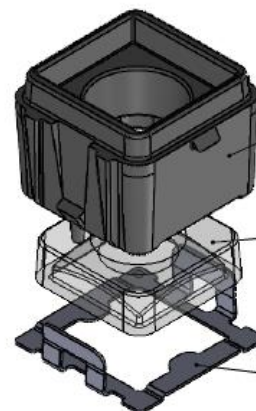
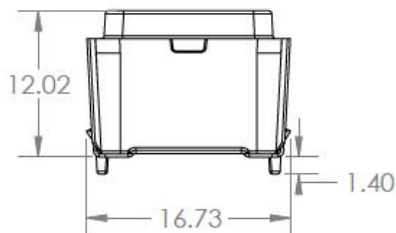
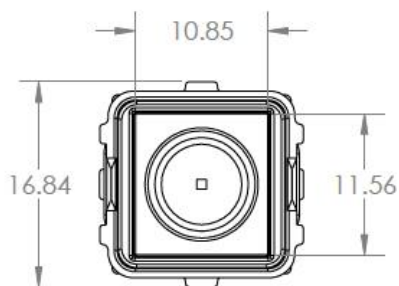
MLA SOLDER CLIP

SIZE	DWG. NO.	REV
A	P/N: 13010	B
SCALE: 2:1	WEIGHT:	SHEET 1 OF 1

CAD files available upon request from CoreLed Engineering

Mechanical Profile: Single MLA

Prototype Design



SINGLE MLA HOUSING
P/N: 13112

SINGLE MLA COLLIMATOR
P/N: 13111

SOLDER CLIP
P/N: 13010

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
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THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC
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FINISH

DO NOT SCALE DRAWING

NAME DATE
RSALTON 9/5/24

DRAWN

CHECKED

ENG APPR.

MFG APPR.

Q.A.

COMMENTS:

CoreLed Systems, LLC

TITLE:

SINGLE MLA
SUB-MODULE

SIZE DWG. NO.

A

P/N: 13115

REV

1.0

SCALE: 2:1 WEIGHT:

SHEET 1 OF 2

PROPRIETARY AND CONFIDENTIAL

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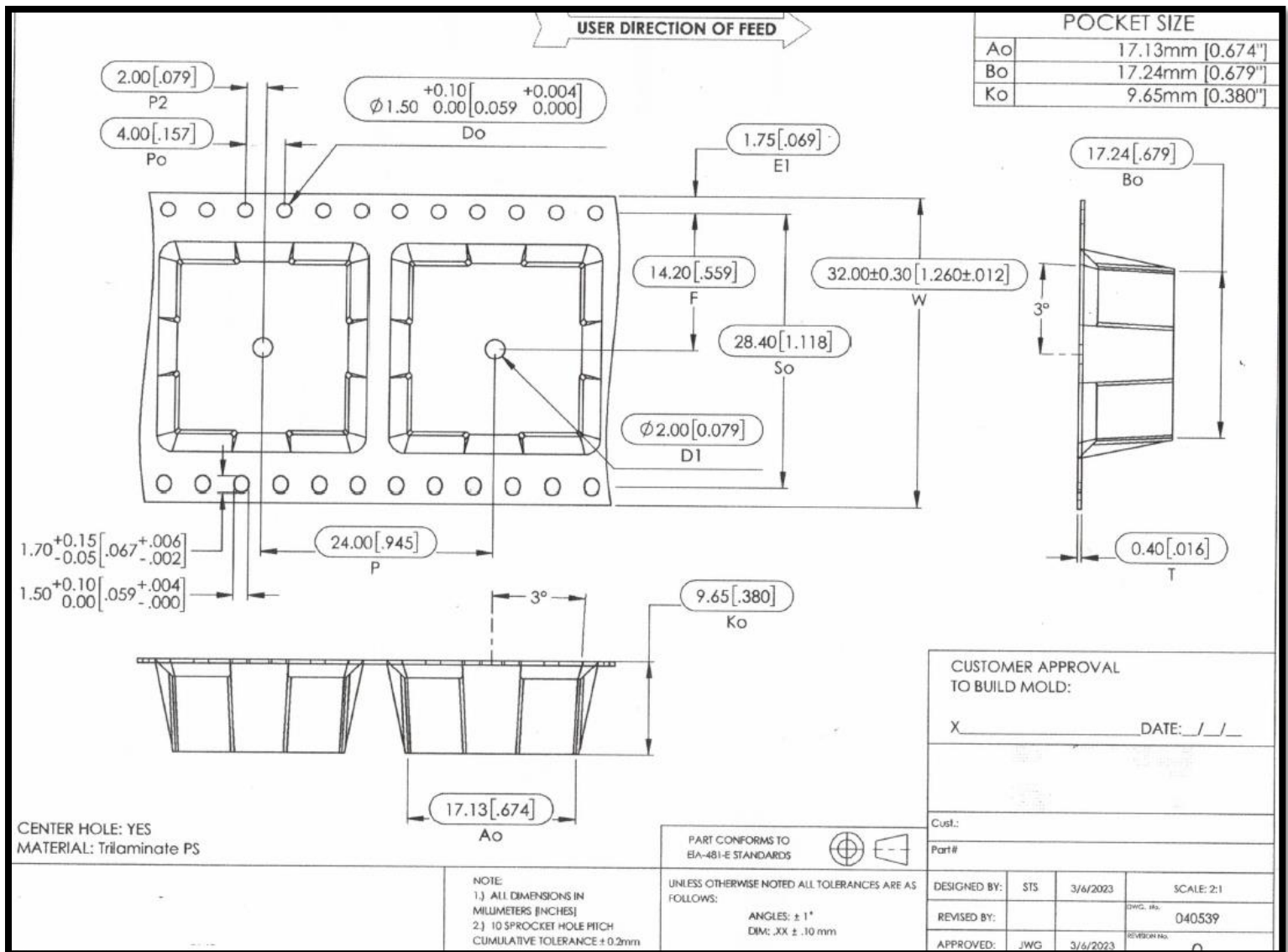
USED ON

APPLICATION

CAD files available upon request from CoreLed Engineering

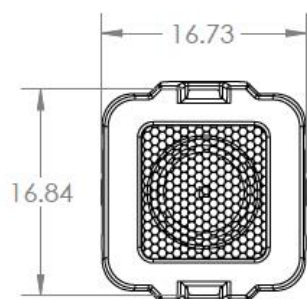
Packaging: Individually packaged & delivered in tape and reel

Preliminary Design

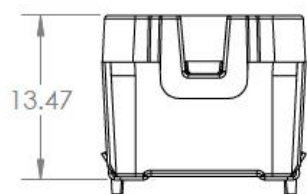
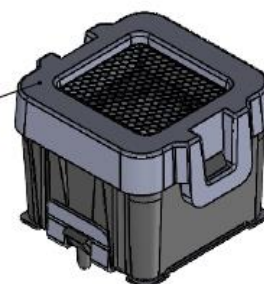


Appendix 1: Single MLA Cap

Prototype Design



SINGLE MLA CAP
P/N: 13113



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FRACTIONAL ±	
ANGULAR: MACH ± BEND ±	
TWO PLACE DECIMAL ±	
THREE PLACE DECIMAL ±	
INTERPRET GEOMETRIC TOLERANCING PER:	
MATERIAL	
FINISH	

	NAME	DATE
DRAWN	RSALTON	9/5/24
CHECKED		
ENG APPR.		
MFG APPR.		
G.A.		
COMMENTS:		

CoreLed Systems, LLC		
TITLE:		
SINGLE MLA SUB-MODULE		
SIZE	DWG. NO.	REV
A	P/N: 13115	1.0
SCALE: 2:1	WEIGHT:	SHEET 2 OF 2

CAD files available upon request from CoreLed Engineering