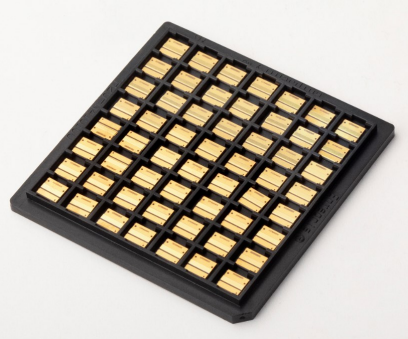
Advanced Materials

FL-AMC series



Features

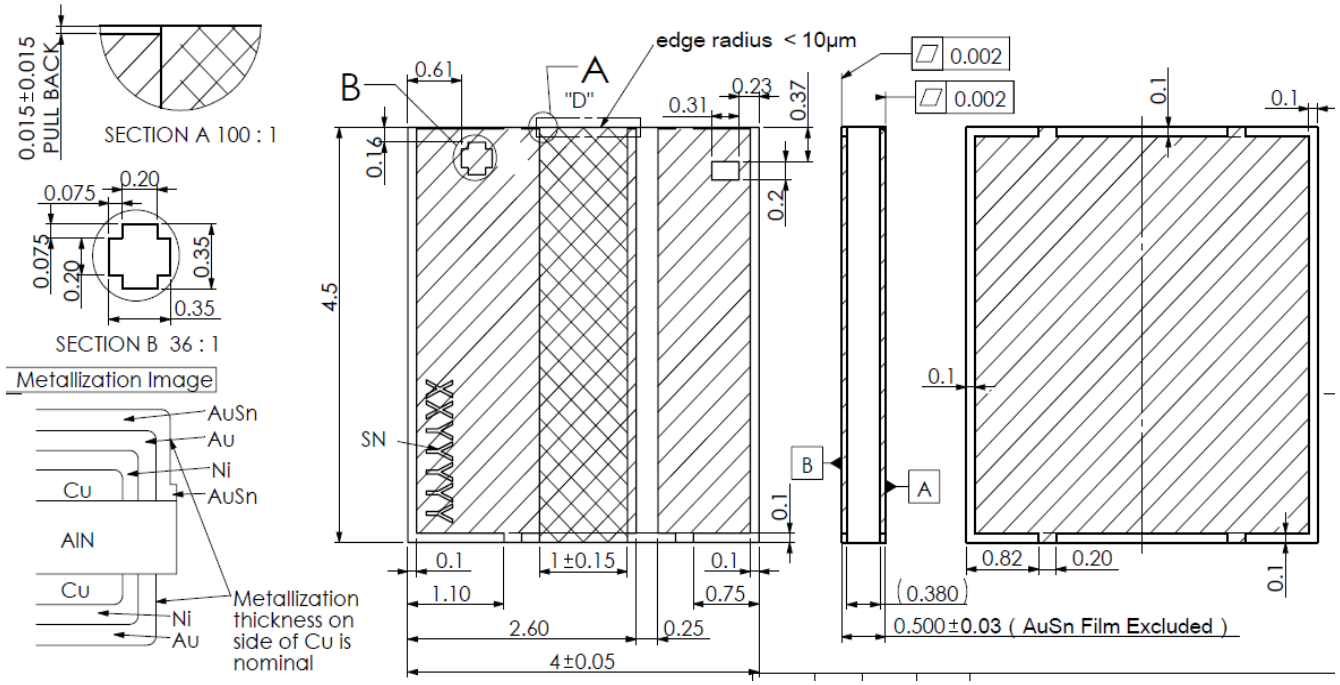
- AuSn pre-deposited
- Copper clad layer
- Low thermal resistance
- CTE matched for bonding
- High reliability

Applications

- Industrial application
- Scientific Research and Engineering

Product Dimensions (mm)

FL-AMC-4045



Remark: The structure drawing is for reference only. Please feel free to contact us for any special requirements.

Focuslight Technologies Inc.
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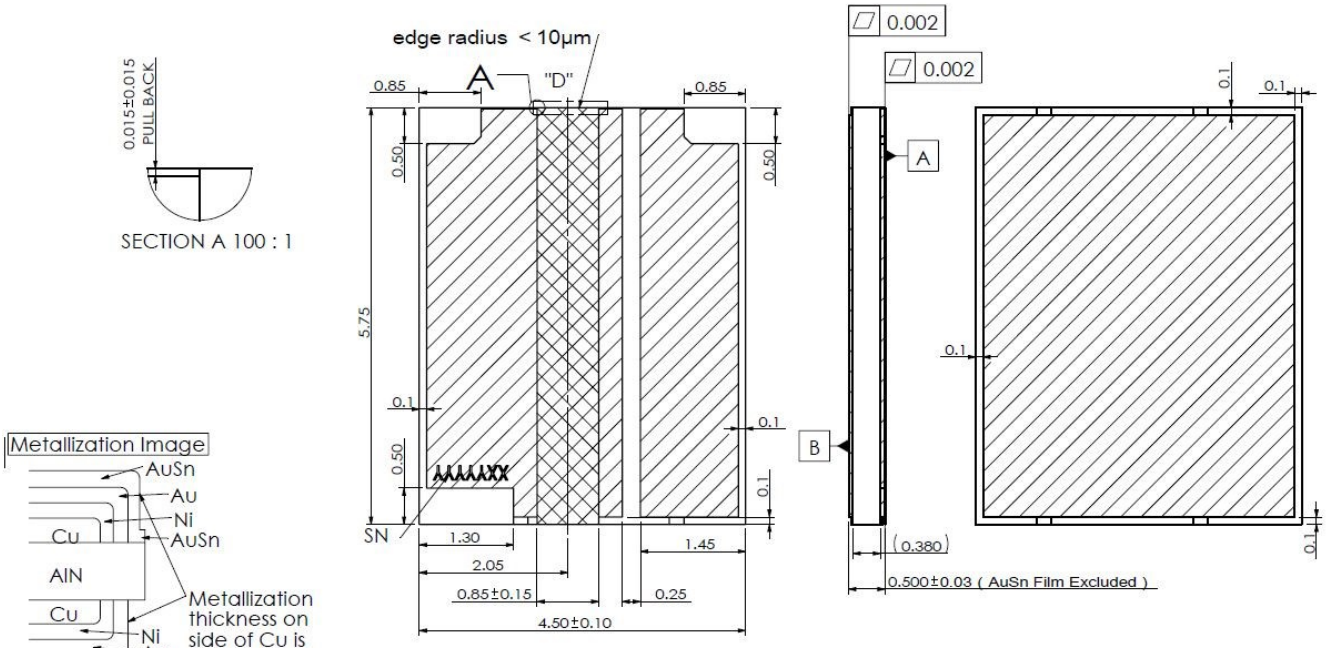
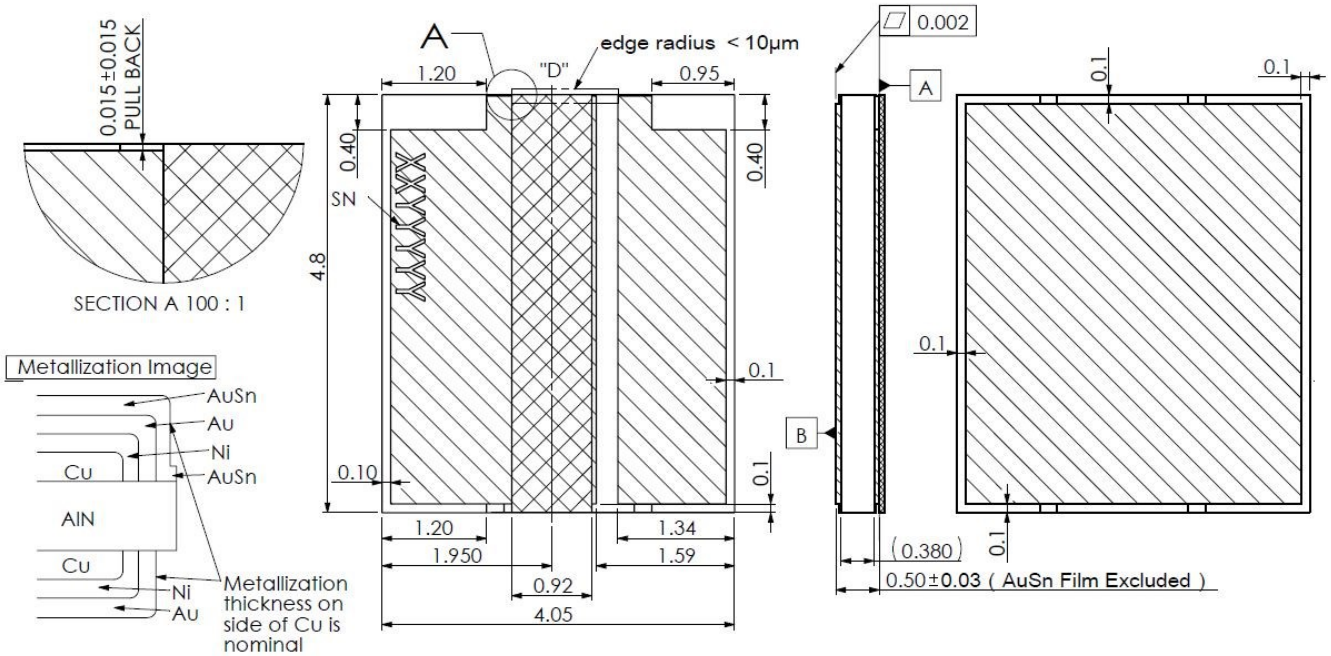
Product Dimensions (mm)

FL-AMC-4557



FL-AMC-4048



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Product Specifications

Product Code		AMC000001	AMC000002	AMC000003
Part No.[1]		FL-AMC-4045	FL-AMC-4557	FL-AMC-4048
Dimension Parameters	**Unit**	**Value**	**Value**	**Value**
Length	mm	4.50+/-0.05	5.75+/-0.05	4.80+/-0.05
Width	mm	4.00+/-0.05	4.50+/-0.05	4.05+/-0.05
Thickness	mm	0.50+/-0.03	0.50+/-0.03	0.50+/-0.03
Pullback	μm	15+/-15	15+/-15	15+/-15
Au Thickness	μm	≥1.0	≥1.0	≥1.0
AuSn Thinkness	μm	6.0+/-1.0	6.0+/-1.0	6.0+/-1.0
Performance Parameters				
Melting Point	°C	280-320	280-320	280-320
Roughness	μm	≤0.4	≤0.4	≤0.4
Flatness	μm	≤2.0	≤2.0	≤2.0
Thermal Resistance	K/W	≤2.1	≤2.1	≤2.1
Storage Condition[2]				
Storage Environment	\	Nitrogen Environment	Nitrogen Environment	Nitrogen Environment
Environment Temperature	°C	22+/-3	22+/-3	22+/-3
Relative Humidity	%	20-30	20-30	20-30
Warranty	month	12	12	12

[1] Part No. = Brand Code - Series - Specification.

[2] Exceeding storage conditions may cause product performance reduction.

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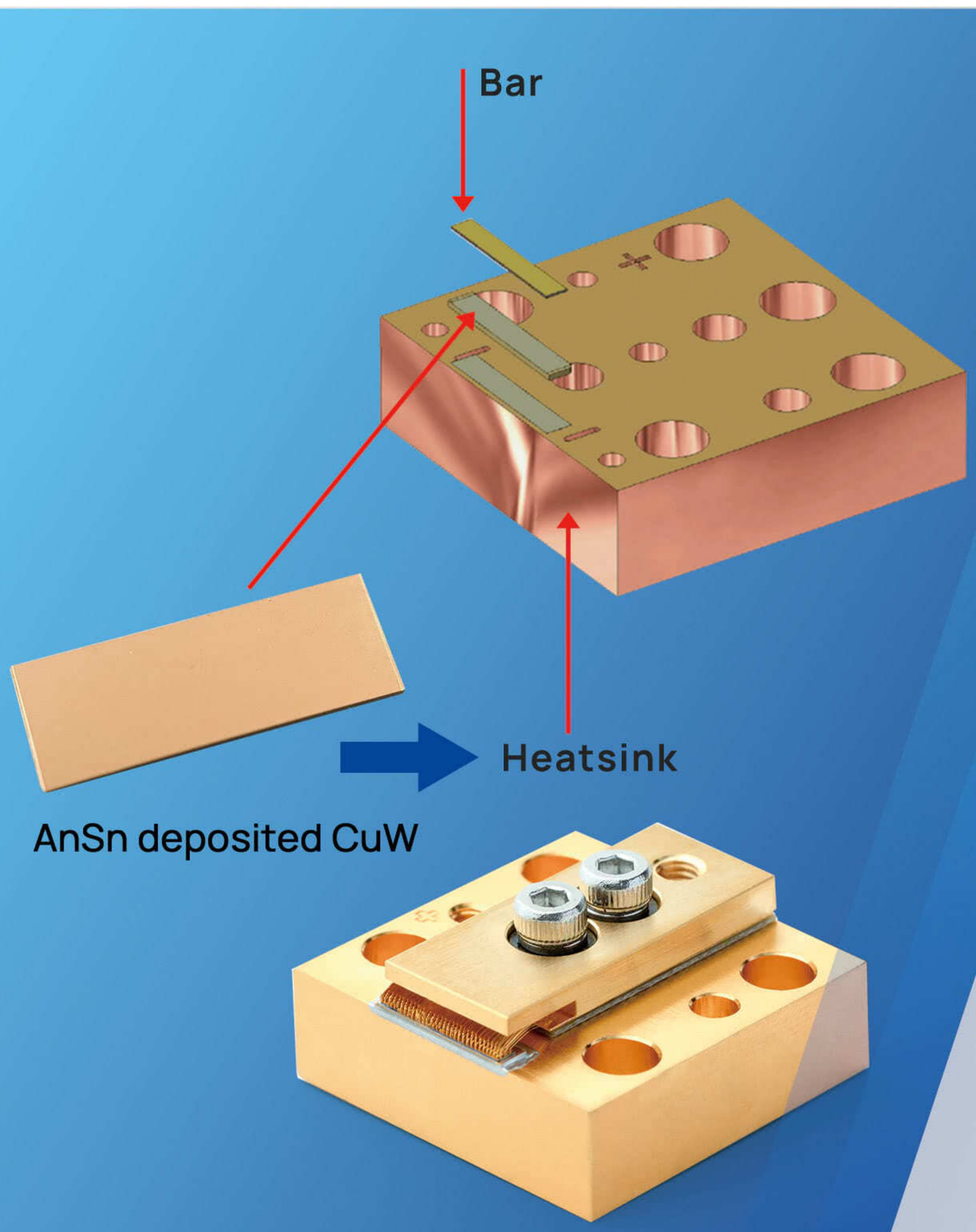
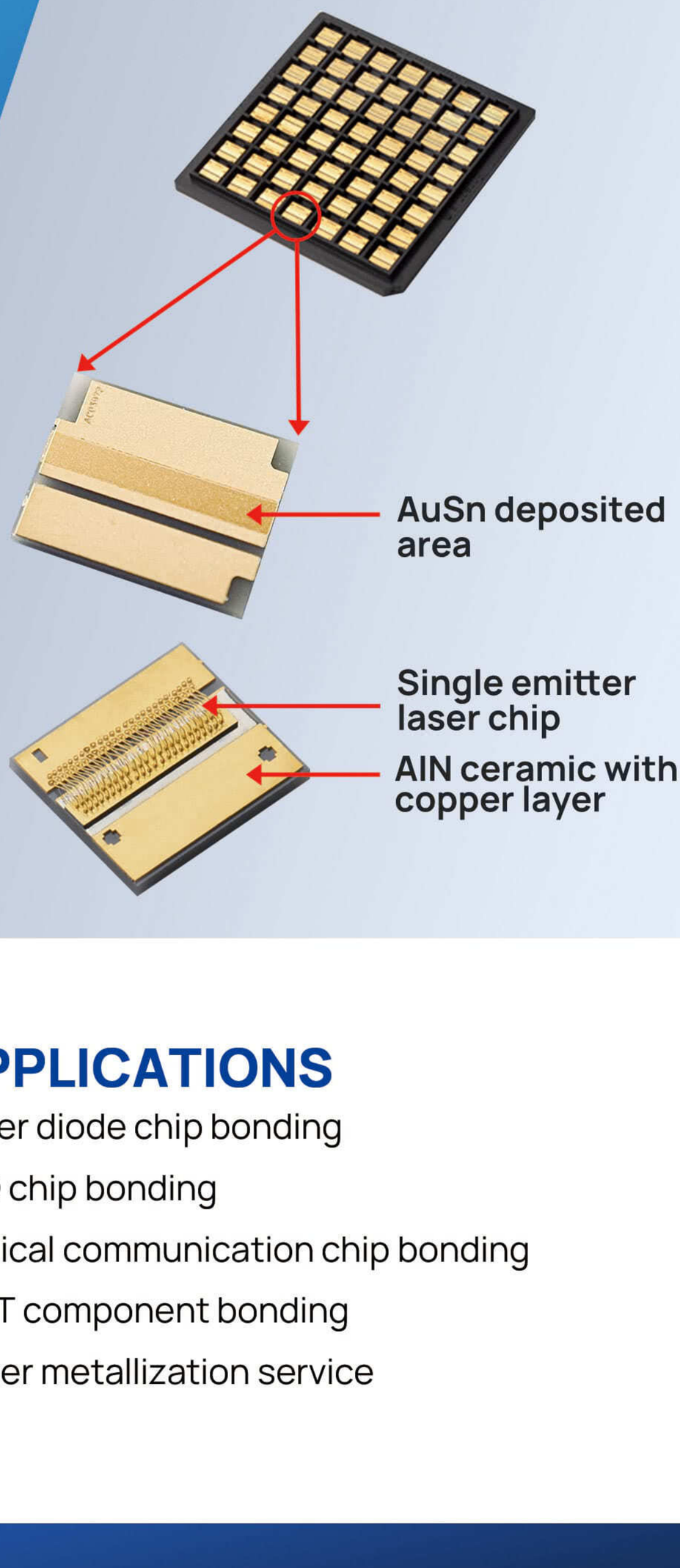
FOCUSLIGHT
Never stop exploring

ADVANCED MATERIALS





FEATURES

- Low thermal resistance
- High matching CTE
- High precision surface
- High precision wafer processing
- High thermal conductivity
- Low warpage

APPLICATIONS

- Laser diode chip bonding
- LED chip bonding
- Optical communication chip bonding
- IGBT component bonding
- Other metallization service

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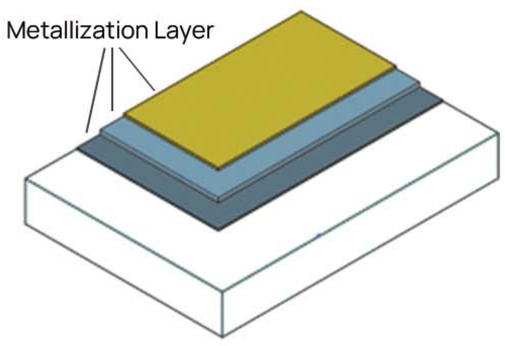
AuSn Pre-deposited Substrates

Specifications		FL-AMC-4045	FL-AMC-4048	FL-AMC-4557
Material	\		AlN	
Dimension	Length（mm）	4.50	4.80	5.75
	Width (mm)	4.00	4.05	4.50
	Thickness（mm）	0.50	0.50	0.50
	Thickness of Au (μm)	≥1.0	≥1.0	≥1.0
	Pullback (μm)	0~30	0~30	0~30
AuSn	Thickness (μm)	6.0+/-1.0	6.0+/-1.0	6.0+/-1.0
	Melting point (K)	280~320	280~320	280~320
Surface	Roughness (μm)	≤0.4	≤0.4	≤0.4
	Flatness (μm)	≤2.0	≤2.0	≤2.0
Thermal resistance	Rth (K/W)	≤2.1	≤2.1	≤2.1

AuSn Pre-deposited CuW Substrates

Specifications		AMM-10217506	AMM-10622503	AMM-11541003
Material	\		Cu (10%) W (90%)	
Dimension	Length (mm)	10.2	10.6	11.5
	Width (mm)	1.75	2.25	4.10
	Thickness (mm)	0.6	0.3	0.3
	Thickness of Au (μm)	≥0.25	≥0.25	≥0.25
AuSn	Thickness (μm)	6.0+/-1.0	6.0+/-1.0	6.0+/-1.0
	Melting point (°C)	280~320	280~320	280~320
	AuSn deposition side	double side	Single side	Single side
Surface	Roughness (μm)	≤0.4	≤0.4	≤0.4
	Warpage (μm)	≤10.0	≤10.0	≤10.0



Metallization Service

Metallization	Process	Thickness (um)	Roughness（um）	Flatness (um)
AuSn	PVD	1~7, +/-1	< 0.4	<2
Au	PVD	>0.15		
	Electroplating	>1		
Ni	Electroplating	>1		
Ti	PVD	>0.05		
Pt	PVD	>0.05		

COMPANY INTRODUCTION

Founded in 2007 and headquartered in Xi'an, China, Focuslight Technologies Inc. is a fast-growing company that develops and manufactures high-power diode laser components and materials (photon generation), laser optics (photon control) as well as photonic application modules, assemblies, and sub-systems (photonics application solutions) with a focus on automotive, pan-semiconductor, and medical & health application solutions. Focuslight has over 400 patents worldwide and is ISO 14001, ISO 45001, ISO 9001:2015, and IATF 16949 certified. In December 2021, Focuslight announced the IPO on the Shanghai Stock Exchange (Ticker Symbol: 688167).

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