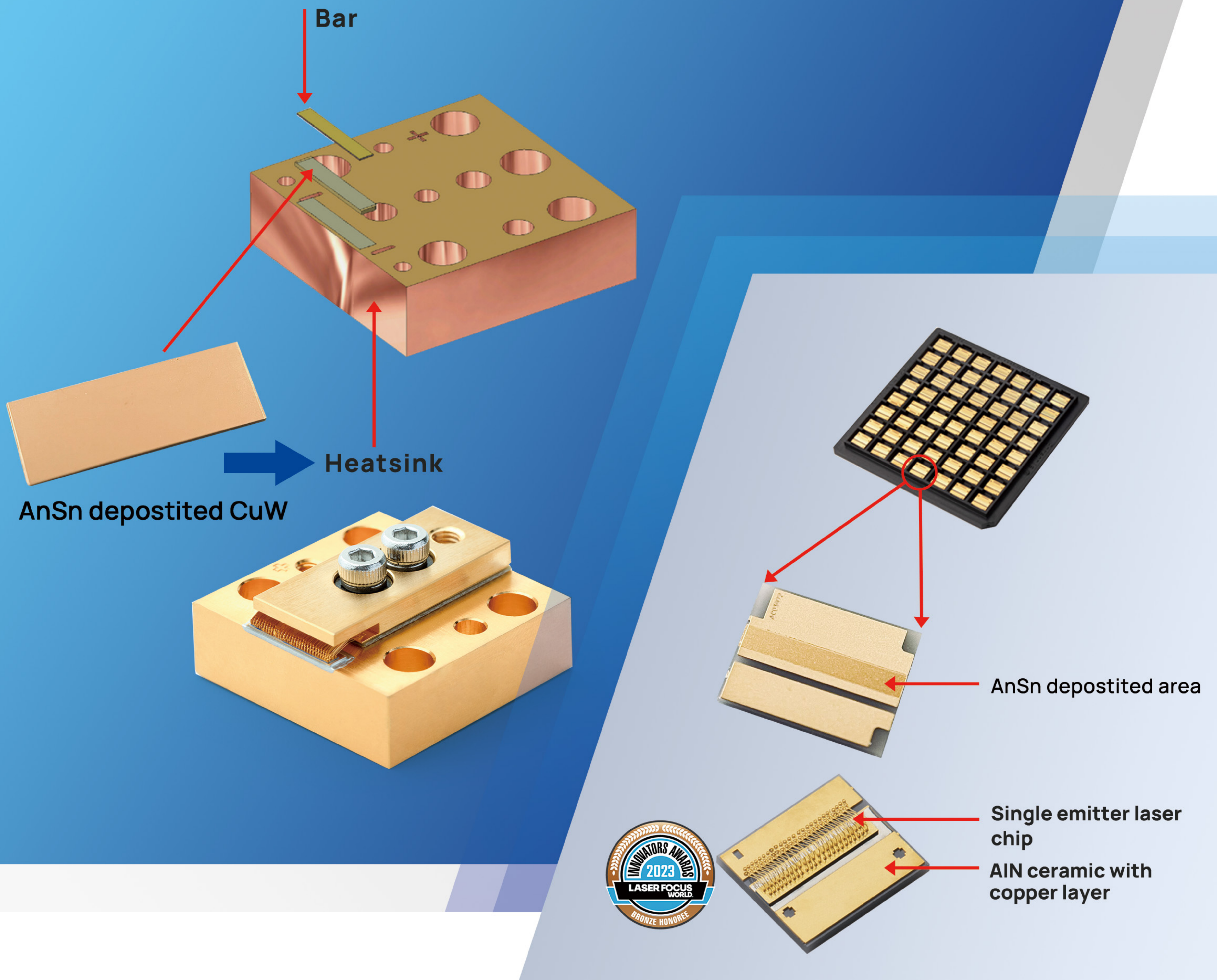


ADVANCED MATERIALS



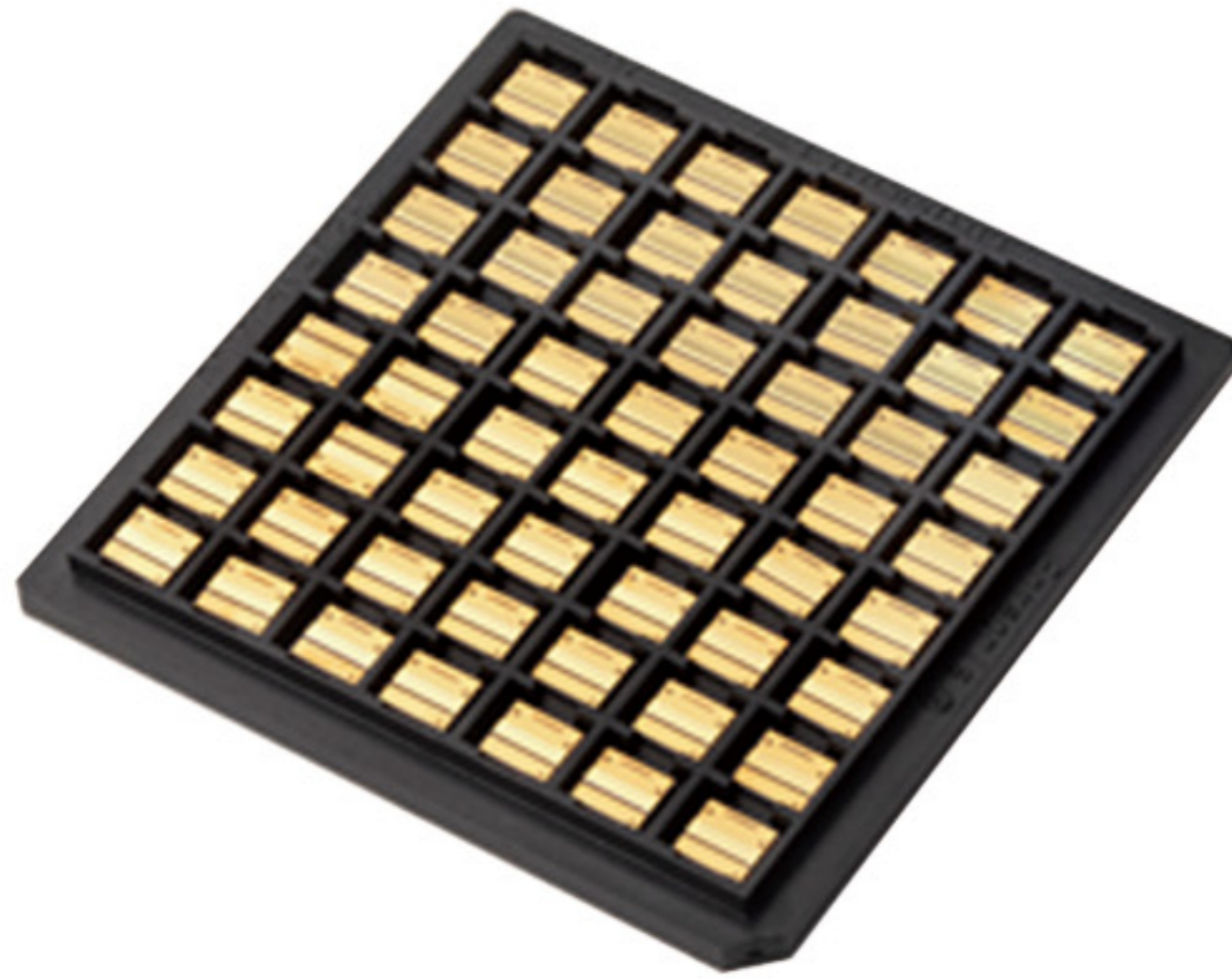
FEATURES

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

APPLICATIONS

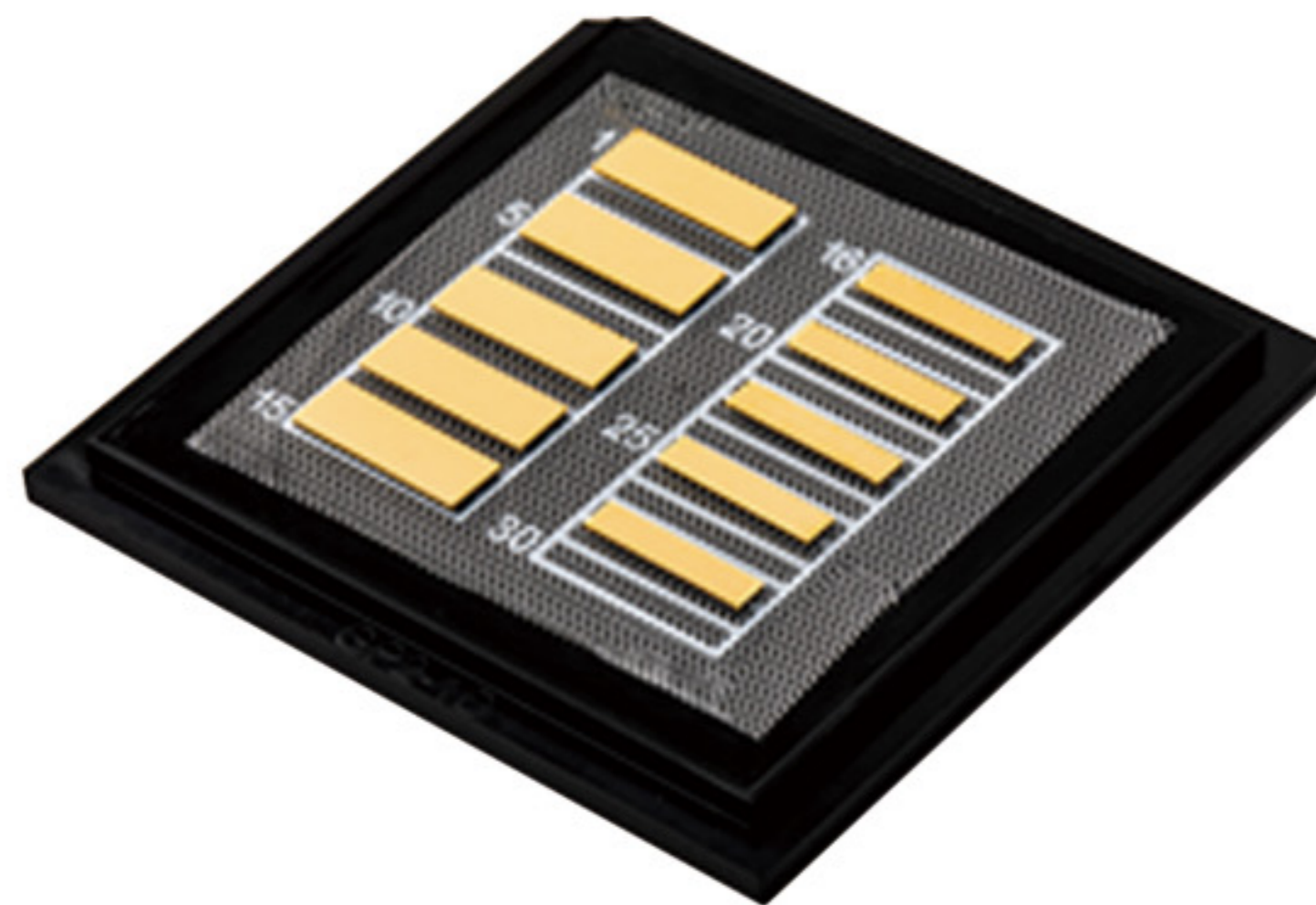
- laser diode chip bonding
- LED chip bonding
- Optical communication chip bonding
- IGBT component bonding
- Other metallization service

AuSn Pre-deposited Substrates



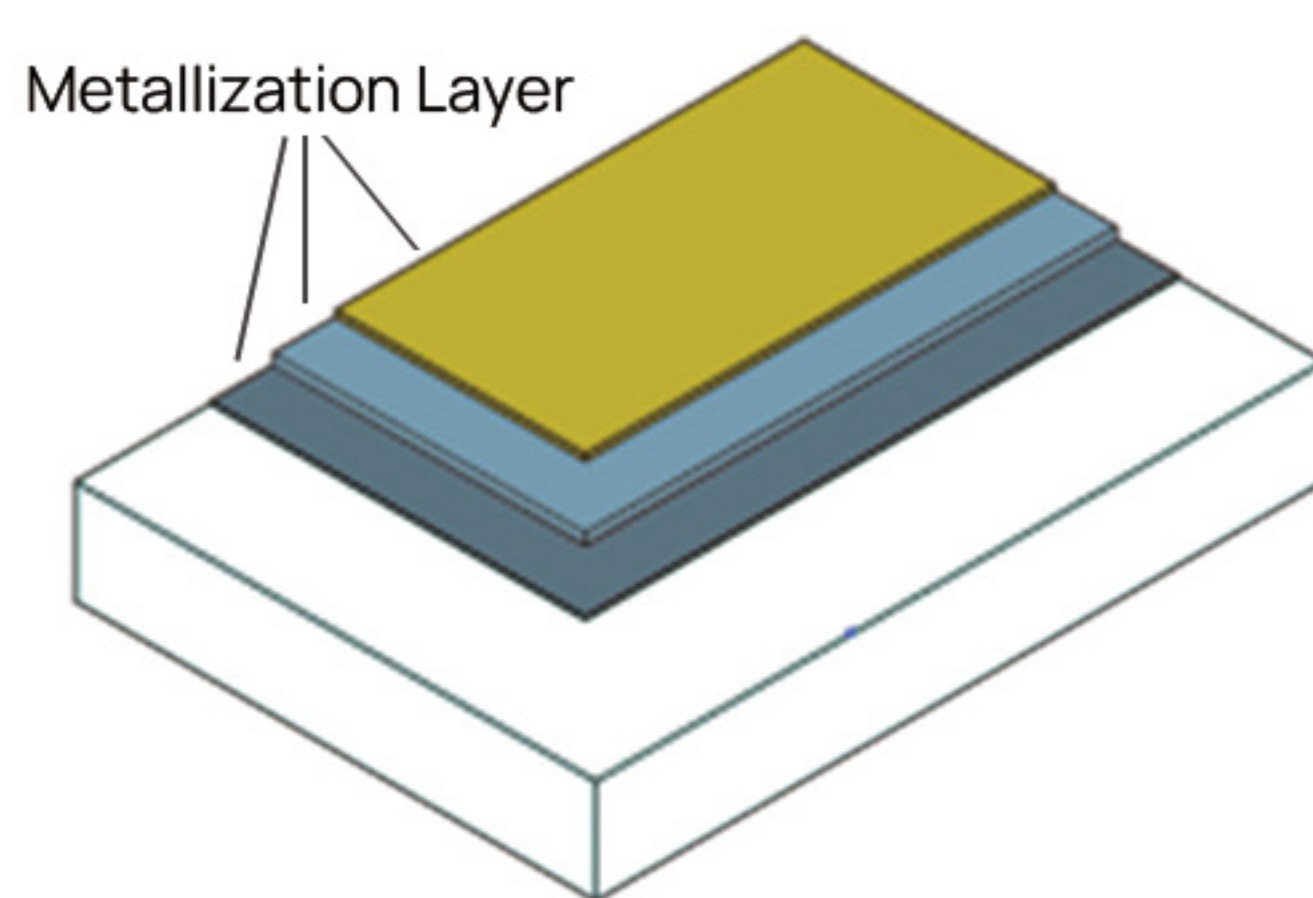
Specifications		FL-AMC-4045	FL-AMC-4048	FL-AMC-4557
Material	\	AlN		
Dimension	Length (mm)	4.50	4.80	5.75
	Width (mm)	4.00	4.05	4.50
	Thickness (mm)	0.50	0.50	0.50
	Thickness of Au (μm)	≥1.0	≥1.0	≥1.0
	Pullback (μm)	0~30	0~30	0~30
AuSn	Thickness (μm)	6.0+/-1.0	6.0+/-1.0	6.0+/-1.0
	Melting point (K)	280~320	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 public company (SSE Star Market: 688167) that develops and manufactures high power diode lasers (photon generation), laser optics (photon control), and photonics modules and systems (application solutions) with a focus on automotive, pan-semiconductor, and medical & health application solutions. In 2017, Focuslight successfully acquired LIMO GmbH, and completed the brand unification in January 2022. In January 2024, Focuslight acquired SUSS MicroOptics (now as Focuslight Switzerland). Focuslight owns over 400 patents worldwide and is ISO 14001, ISO 45001, ISO 9001, and IATF 16949 certified. Additional information can be found at www.focuslight.com.