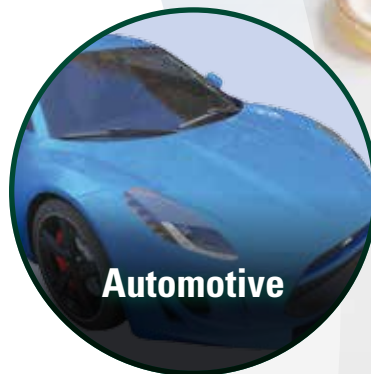


HIGH-TEMPERATURE GOLD SOLDER AND BRAZE MATERIALS

Indium Corporation
is a leading joining
and bonding materials
innovator for
medical, aerospace,
optoelectronics, and
automotive applications.



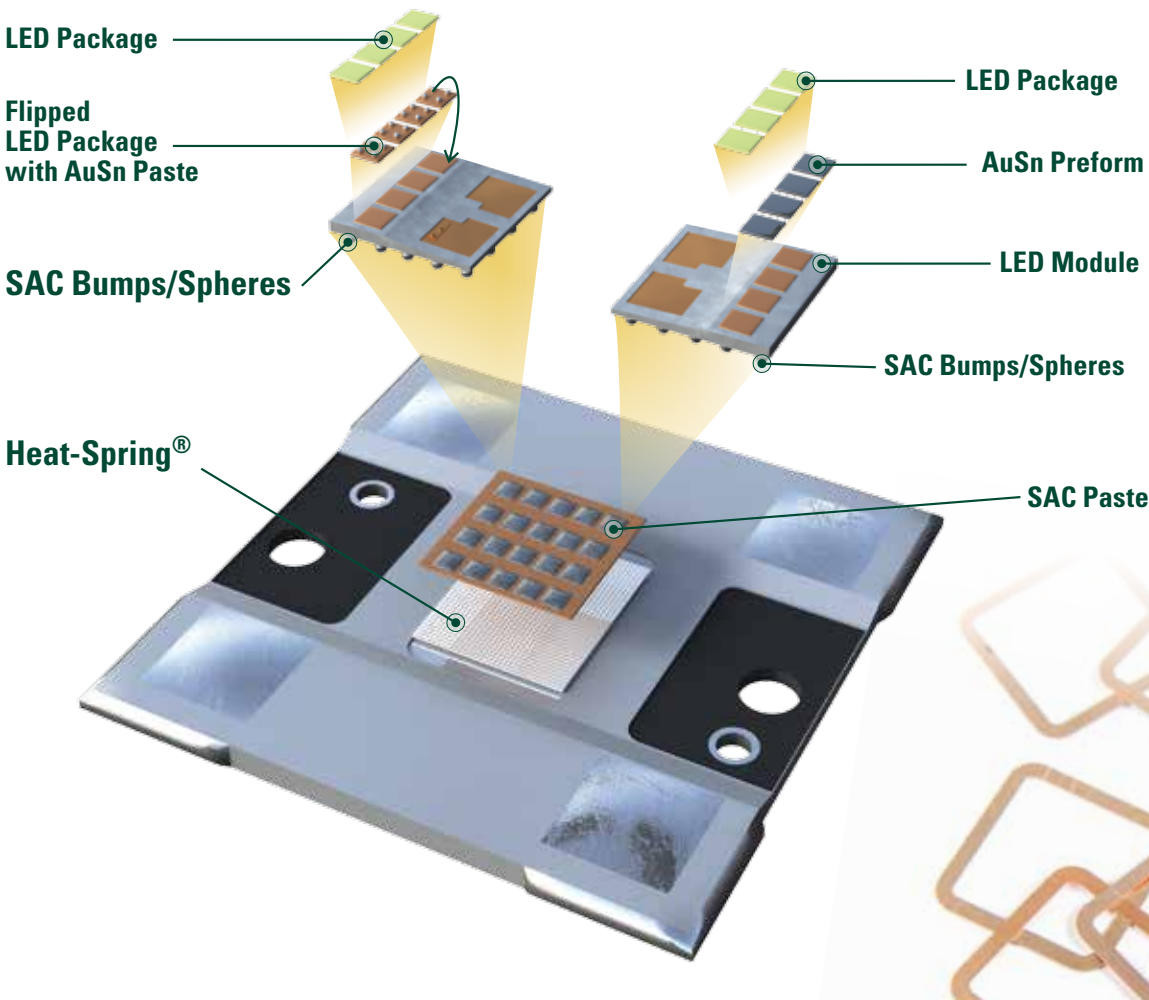
HIGH-TEMPERATURE GOLD SOLDER AND BRAZE MATERIALS

BENEFITS OF HIGH-TEMPERATURE ALLOYS

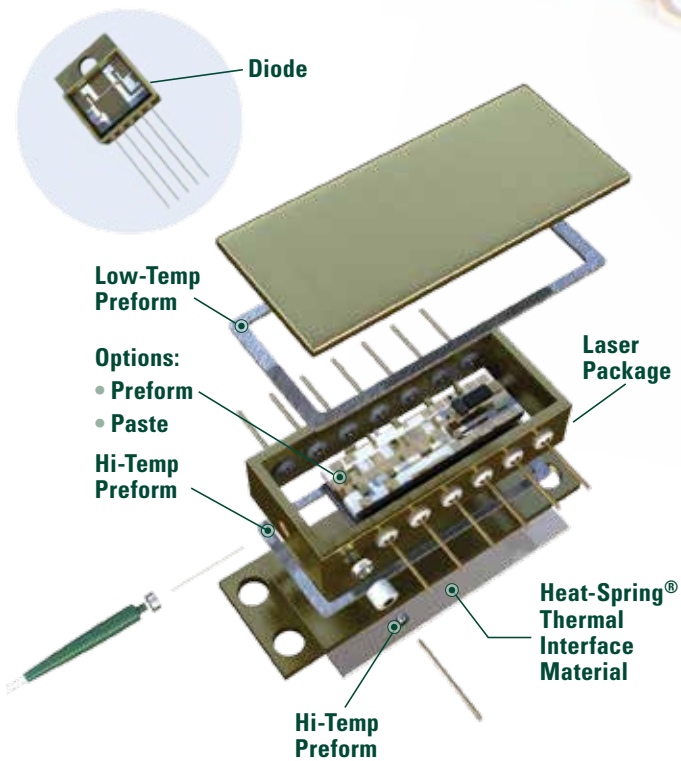
- Highest tensile strength of any solder
- High melting point is compatible with subsequent reflow processes
- Pb-free and RoHS compliant
- Superior thermal conductivity
- Resistance to corrosion
- Superior thermal fatigue resistance
- Good joint strength
- Excellent wetting properties
- Resistance to oxidation

	Attributes	Alloys	Temperature
Gold-Based Alloys	Strong bond strength, excellent corrosion and oxidation resistance, and good thermal and electrical transfer at the braze joint.	Indalloy®182 (80Au/20Sn) Indalloy®183 (88Au/12Ge) Indalloy®178 (82Au/18In) Indalloy®195 (80Au/20Cu) Braze Indalloy®B955 (50Au/50Cu) Braze Indalloy®B9902 (65Cu/35Au) Indalloy®200 (100Au)	280°C Eutectic 356°C Eutectic Solidus 451°C/Liquidus 485°C 891°C Eutectic Solidus 955°C/Liquidus 970°C Solidus 990°C/Liquidus 1010°C 1064°C Eutectic
Silver-Based Alloys	High thermal and electrical conductivity, capillaries very well into joints, and holds up well in applications with lots of stress and with CTE mismatches.	Braze Indalloy®B625 (61.5Ag/24Cu/14.5In) Braze Indalloy®B6851 (63Ag/27Cu/10In) Indalloy®193 (72Ag/28Cu) Braze Indalloy®B962 (99.99Ag)	Solidus 625°C/Liquidus 705°C Solidus 685°C/Liquidus 730°C 780°C Eutectic 962°C Eutectic
OFHC Copper (Oxygen-Free Highly-Conductive)	Highly conductive, lower cost alternative, and capillaries well into joints for hermetic sealing applications.	(99.95Cu and 99.99Cu)	1085°C Eutectic

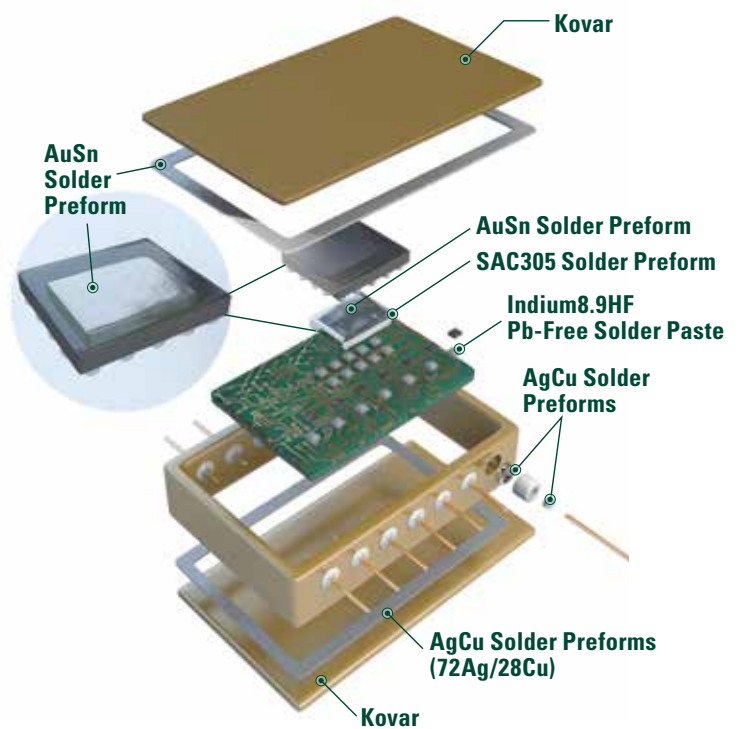
AUTOMOTIVE LED MODULE ASSEMBLY



PRODUCTS FOR LASER AND OPTICAL PACKAGING



GOLD AND BRAZE MATERIALS FOR HERMETIC SEALING



PRECISION PREFORMS FOR IMPLANTABLE MEDICAL DEVICES

Indium Corporation's Manufacturing Engineers have developed advanced gold and braze preform manufacturing technology to produce "best in class" precision preforms. These high-quality preforms redefine the boundaries of what's capable in regard to complex designs and aggressive aspect ratios.

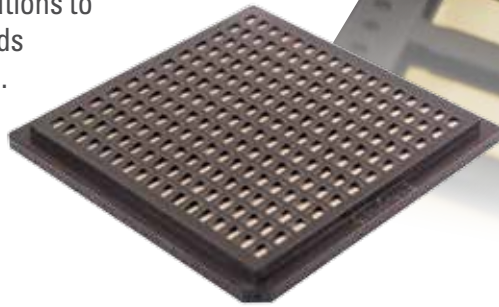


PRECISION PACKAGING

Indium Corporation's packaging protects your solder preforms during shipping and handling, and is designed for ease of introduction into the manufacturing process.

- Jar or bulk pack
- Bulk tray pack
- Array tray pack
- Tape & reel
- Waffle pack

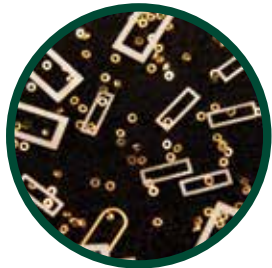
We also can create customized packaging solutions to meet your needs and processes.



NEED IT QUICKLY? GOLD PREFORM QUICK TURN PROGRAM

- Designed to deliver parts QUICKLY and AFFORDABLY
- New design, new tool, prototype quantities in 1-2 WEEKS
- Engineering support from design to production

GOLD AND GOLD-BASED SOLDERS ARE AVAILABLE AS:



- Preforms and ribbon
 - Thickness from 0.0127mm (0.0005") and greater
 - Tight dimensional tolerances ensure repeatable solder volume
 - Flatness measurement capabilities to 0.00254mm (0.0001")
 - Large die library with in-house tooling capabilities
 - Tiny solid shapes from 0.152mm (0.006")
 - High aspect ratio and complex special shapes

- Wire
 - Diameter starting at 0.025mm \pm 0.0127mm (0.001" \pm 0.0005")
 - Tight dimensional tolerances
 - Packaging designed to minimize breakage of wire in soldering process
 - Maximum of 80% Au

- Paste
 - No-clean and water-soluble
 - Type 3-6 AuSn powder

- Spheres
 - Sizes starting at 0.254mm (0.010")
 - Tight dimensional tolerances down to \pm 5 microns



Contact our engineers today: gold@indium.com

Learn more: www.indium.com/brazealloys

From One Engineer To Another®

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