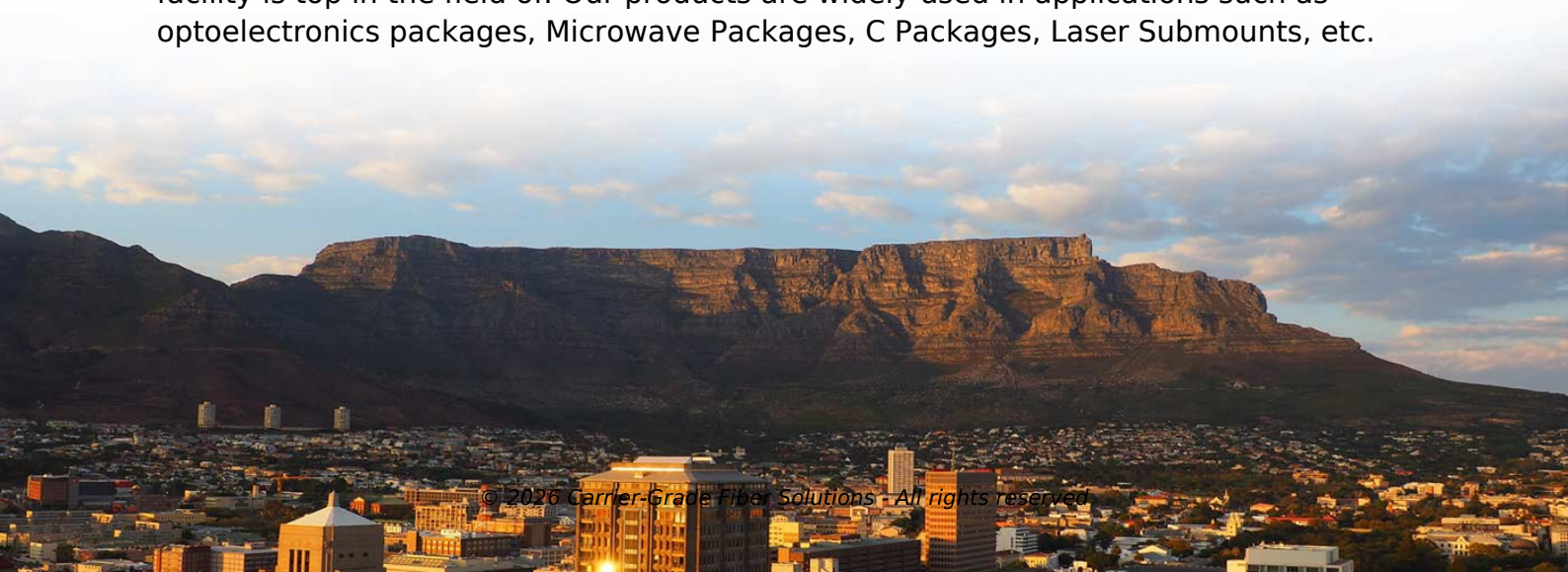
Tungsten-copper heat sink for optical modules

Overview

A tungsten copper (WCu) heat sink is a composite material composed of tungsten (W) and copper (Cu), offering a unique balance of properties from both metals. WCu heat sinks are available in different compositions, such as W70Cu30 or W80Cu20, each optimised for various performance. Among the many materials available for thermal management, tungsten copper (WCu) heat sinks stand out for their unique ability to handle intense thermal loads without compromising reliability. The thermal properties of our molybdenum-copper laminates (CMC) can be customized for specific requirements of high-frequency electronics such. A heat sink is designed to maximize its surface area in contact with the cooling medium surrounding it, such as the air. Air velocity, choice of material, protrusion design, and surface treatment are factors that affect the performance of a heat sink. Electronic power components and power modules exhibit high heat losses due to advances. Torrey Hills' heat sinks manufacturing facility specializes in the R&D and production of high-tech electronic packaging materials, namely Copper tungsten (WCu, CuW), Molybdenum copper (MoCu, CuMo), and copper molybdenum copper (Cu/Mo/Cu) heat sinks and shims. The facility is top in the field of. Our products are widely used in applications such as optoelectronics packages, Microwave Packages, C Packages, Laser Submounts, etc.



Article Content

Dec 16, 2025

Optical Transceiver Cooling Solutions | Heatscape

Scalable and reliable high-volume solution for cooling of pluggable optical transceiver. Advanced heatpipe assembly for cooling of multiple pluggable optics modules in a row, each utilizing heatpipes

Oct 26, 2025

Tungsten Copper Heat Sink

Tungsten-copper (WCu) electronic packaging material possesses the desirable characteristics of low expansion from tungsten and high thermal conductivity from copper. One of its valuable features is

Sep 26, 2025

Copper Tungsten Heat Sinks – T& D Materials

The tungsten component enhances the material''s durability and thermal stability, while copper ensures excellent thermal conductivity. Copper tungsten heat sinks

Mar 29, 2026

Copper Tungsten Heat Sinks | Thermal | Electronic Components ...

Most heat sinks are made of aluminum or copper, materials known for their high thermal conductivity. Aluminum heat sinks are lightweight and cost-effective, ideal for general-purpose cooling solutions,

Jan 16, 2026

Tungsten Copper Heat Sink Market 2025

Tungsten Copper Heat Sink Market size was valued at US$ 623 million in 2024 and is projected to reach US$ 934 million by 2032, at a CAGR of 5.2%

Feb 14, 2026

Understanding Tungsten Copper Heat Sinks: An Essential Guide for ...

Tungsten copper heat sinks are primarily composed of a mixture of tungsten and copper. This combination offers a unique blend of properties that make it ideal for heat dissipation. Tungsten,

Jan 24, 2026

From Design to Application: A Comprehensive Analysis of copper

Tungsten-copper heat sinks play a key role in high-power lasers, used to cool laser chips to ensure stable laser output. Tungsten-copper heat sinks are high-performance composite materials with the

Nov 06, 2025

Tungsten-Copper Heat Sinks: A New Chapter in Heat Dissipation for ...

This commitment to sustainability ensures that copper-tungsten heat sinks can continue to contribute to technological advancements while minimizing their environmental impact. copper-tungsten heat

Nov 19, 2025

Understanding Tungsten Copper Heat Sinks | AMT

In this blog, we''ll explore what makes tungsten copper heat sinks superior, where they are used, how they''re made, and why they''re an excellent choice for high

Aug 18, 2025

Optical Module Housings Guide

Copper & Tungsten-Copper Alloys: Copper is a superstar in thermal conductivity. Innovative alloys, like the new tungsten-copper material developed by Sirui New Materials, are

Dec 29, 2025

Tungsten Copper Heat Sinks-Tungsten Alloy

Tungsten Copper Heat Sink If you have any interest in our tungsten copper heat sink, please feel free to contact us by email: sales@chinatungsten sales@xiamentungsten or by telephone: 0086

Jun 07, 2026

Tungsten Alloy Heat Sink Material: Advanced Thermal Management ...

Tungsten alloy heat sink material represents a critical class of composite thermal management solutions engineered to address the dual challenges of high thermal conductivity and

Oct 28, 2025

Copper Tungsten, Molybdenum Copper, Cu/Mo/Cu Heat Sinks and

NEW - Copper Tungsten Heat Sinks Off The Shelf - click here for prices Copper Tungsten is one of the most popular refractory metal based heat sink materials offered today. With the new off-the-shelf

Sep 18, 2025

Technical Discussion: Designing Heat Sinks for Cooling

ATS engineer Peter Konstatilakis holds the heat sinks that he designed for cooling QSFP optical transceivers. (Advanced Thermal Solutions, Inc.)

Apr 19, 2026

Tungsten Copper Heat Sinks | matmetals

Our products are widely used in applications such as optoelectronics packages, Microwave Packages, C Packages, Laser Submounts, etc. They are composites

Apr 23, 2026

Application of tungstenâ€“copper composite heat sink materials to ...

3.Â Tungsten particle-reinforced copper One type of Wâ€“Cu MMCs of interest with respect to PFC heat sink application are W particle-reinforced Cu (W p â€“Cu) composites. Such

May 29, 2026

Copper/tungsten mounts keep diode lasers cool

Changing conventions Conventional copper/tungsten heat-sink bases provide thermal conductivity between 170 and 220 W/mK and a reduced

May 21, 2026

Microsoft Word

Using Tungsten Copper as submount and heatsink in High Power Diode Arrays The technologies for high power diode lasers have been rapidly developed during recent years, however, the packaging

May 15, 2026

Tungsten-Copper Heat Sink: An Innovative Material Solution for ...

The tungsten-copper heat sink material is a composite consisting of tungsten and copper, produced through powder metallurgy techniques. This material combines the low coefficient

Dec 10, 2025

Tungsten Copper Heat Sink in 5G High-Speed Optical Devices

As the development of 5G has become a trend, 5G high-speed optical devices and their heat dissipation devices have also become the focus of attention and discussion. And there is no doubt that tungsten

May 12, 2026

Copper Tungsten Heat Sinks – T& D Materials

Copper Tungsten Heat Sinks Copper tungsten heat sinks are composite materials that combine copper and tungsten, offering a unique blend of thermal conductivity

Jun 23, 2026

Heat Sink-Edgetech Industries (A worldwide materials

ETI provides complete service for copper tungsten, copper molybdenum, pure molybdenum, Cu-Mo-Cu and Cu-Mo70Cu-Cu heat sinks. Send your request to

Dec 19, 2025

Copper Tungsten, Molybdenum Copper, Cu/Mo/Cu Heat Sinks and

We offer fabricated electronic components such as copper tungsten, molybdenum copper, Cu/Mo/Cu heat sinks and shims available for purchase online.

Nov 10, 2025

Heat Sink for Optical Modules Market Research Report 2033

According to our latest research, the global heat sink for optical modules market size reached USD 1.34 billion in 2024, reflecting robust growth driven by the surging demand for high-speed data

Jul 11, 2025

Thermal Management Solutions | Plansee

Plansee is a leader in the production and processing of tungsten-copper (WCu) materials and refractory metals such as molybdenum and tungsten, which are ideal for such applications due to their unique

May 06, 2026

Application of tungsten–copper composite heat sink

Request PDF | Application of tungsten–copper composite heat sink materials to plasma-facing component mock-ups | The exhaust of power and

Sep 07, 2025

Tungsten Copper Heat Sinks | matmetals

Tungsten Copper Heat Sinks Quick Overview Our products are widely used in applications such as optoelectronics packages, Microwave Packages, C

Apr 09, 2026

Thermal Management Materials

Our thermal management materials including Molybdenum-Copper (AMC) and Tungsten-Copper (AWC), are engineered to deliver superior thermal conductivity

Feb 19, 2026

Heat Sinks | Supplier | Manufacturer

Our tungsten-copper composites provide high thermal conductivity and perfect expansion matching with compound semiconductors used in opto-electronics and photonic devices, like laser diodes and HHL

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: https://www.piano-lessons.co.za
Email: info@piano-lessons.co.za
Phone: +31 6 37258914
Address: Herengracht 123, 1015 BT Amsterdam, Netherlands

This document is for informational purposes only. Specifications subject to change without notice.