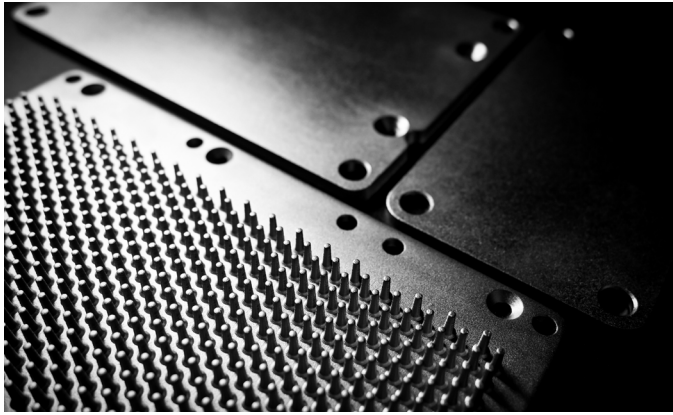




Feature

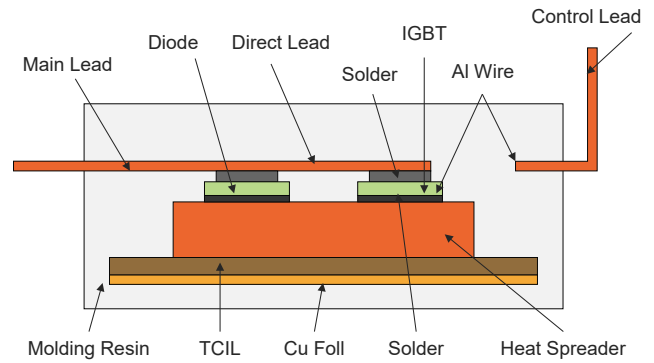
- Excellent firmness under heating process
- No warpage after thermal cycling and solderability testing
- Low thermal expansion coefficient and High thermal conductivity
- Lower weight than Copper
- Lower thickness than Copper, and lower to 1mm
- Easily pass the vibration damping test
- Higher life time than copper after thermal cycling
(from Infineon AN2019-05 report , as below pic.)

CMC AlSiC Heat Spreader

RoHS Compliant

General Description

Ceramic matrix compound to increase the thermal conductivity and the efficient heart dissipation at electronic components.



Could be replaced copper (Cu) or molybdenum copper (Mo-Cu)

Specification

Material	Density (g/cm ³)	Thermal conductivity (W/m·K @25°C)	Coefficient of Thermal Expansion (PPM /°C)
85Mo/15Cu	10.01	195	7.0
50Mo/50Cu	9.51	230	10.3
AlSiC	2.7~3.0	>180	7~10
Cu-AlSiC	2.9~3.2	>360	8~12

CMC AlSiC and MMC Comparison:

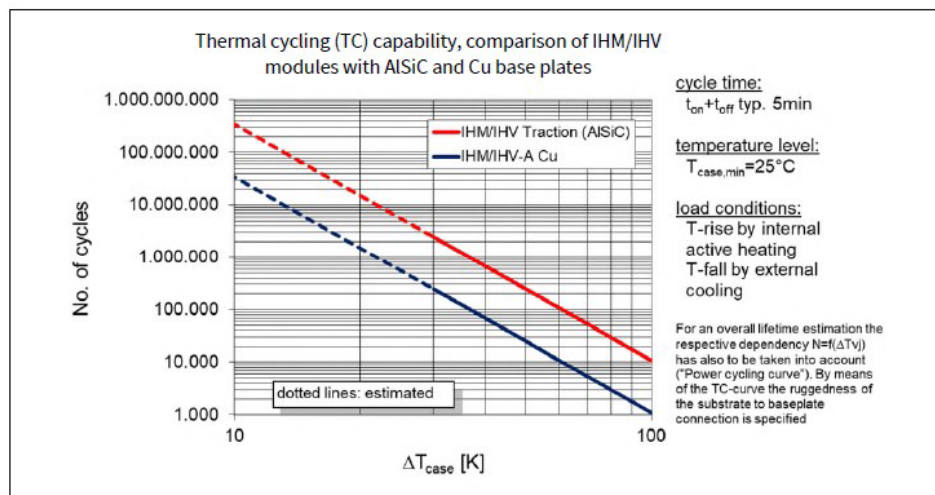
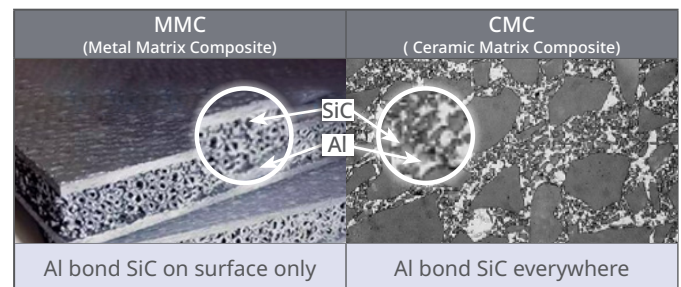


Figure 8 Example for thermal-cycling capability of industrial modules with Cu base plate and traction modules with AlSiC base plate versus the case temperature rise at a fixed minimum case temperature

T-Global Technonology Co., Ltd.

No.33, Ln.50, Daren Rd., Taoyuan Dist., Taoyuan City 330058, Taiwan

T +886-3-361-8899 E service@tglobalcop.com W www.tglobalcop.com

Version20
20250307



NOTICE: The information contained herein is to the best of our knowledge true and accurate. Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. All specifications are subject to change without notice. The protective film and release paper do not affect the function of the product. If there is no special requirement, the default depends on T-Global. Since the varied conditions of potential use are beyond our control, all recommendations or suggestions are presented with out guarantee or responsibility on our part and users should make their own test to determine the suitability of our products in any specific situation. This product is sold without warranty either expressed or implied, of fitness for a particular purpose or otherwise, except that this product shall be of standard quality, and except to the extent otherwise stated in T-Global Technology's invoice, quotation, or order acknowledgment. We disclaim any and all liabilities incurred in connection with the use of information contained herein, or otherwise. All risks of such are assumed by the user. Furthermore, nothing contained herein shall be construed as a recommendation to use any process or to manufacture or to use any product in conflict with existing or future patents covering any product or material or its use.