

Features

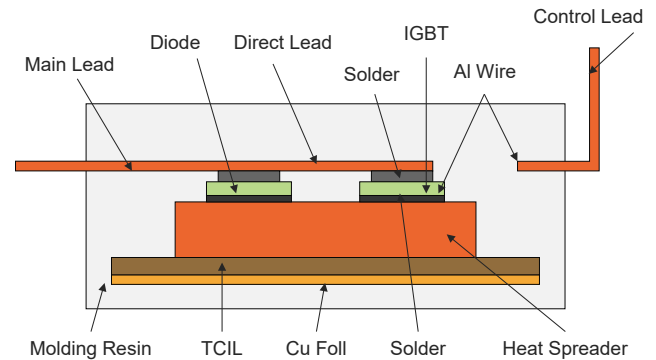
- Excellent firmness under heating process
- No warpage after thermal cycling and solderability testing
- Low thermal expansion coefficient and High thermal conductivity
- Lower weight than Copper
- Lower thickness than Copper, and lower to 1mm
- Pass vibration resistance tests
- Higher life time than 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 heat 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:

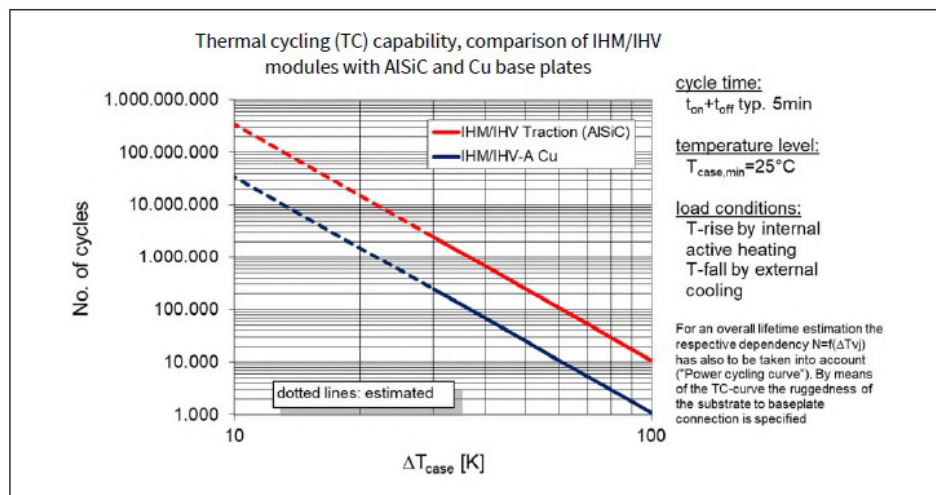
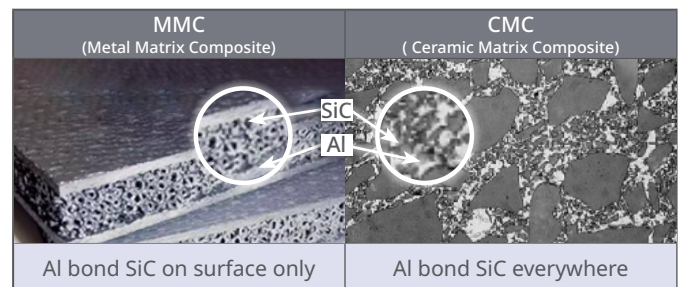


Figure 8 Example for thermal-cycling capability of industrial modules with Cu base plate and traction modules with AlSiC base plate versus the case temperature rise at a fixed minimum case temperature

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