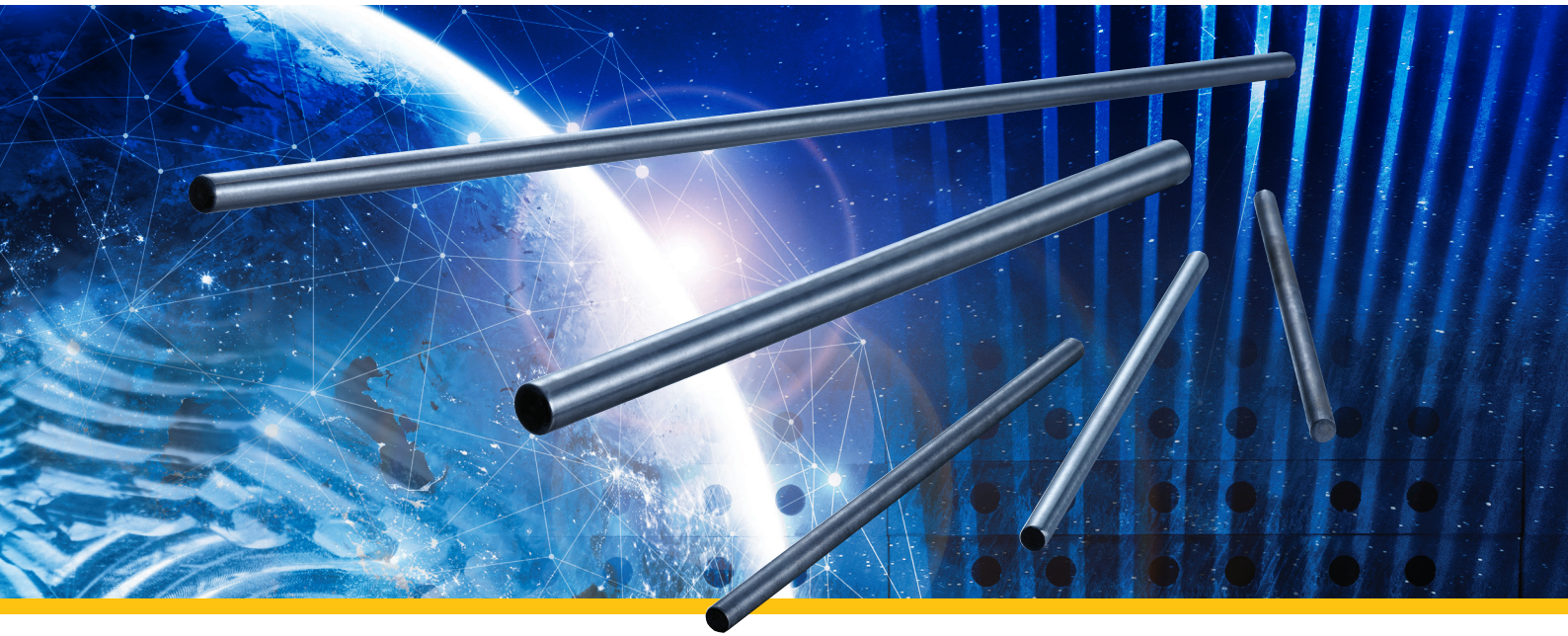


HEATPIPE

Series Pipes Only



Application

In simple terms a Heatpipe is a super heat conductor, and the device can exhibit a thermal conductivity that is in excess of 100 times better than that of an equivalently sized component made from pure copper. So a Heatpipe is a good component in IGBT cooling systems.

General Characteristics

Typically, they take the form of a rod of circular cross section with diameters ranging from 3 to 50 mm, and lengths which may be from only a few centimeters to several metres long.

Length mm	Ø4	Ø5	Ø6	Ø8	Ø10	Ø12	Ø16	Ø18
50	•	•	•	•				
75	•	•	•	•				
100	•	•	•	•	•	•	•	•
125	•	•	•	•	•	•	•	•
200	•	•	•	•	•	•	•	•
250			•	•	•	•	•	•
300					•	•	•	•
350						•	•	•
400							•	•
450							•	•
500							•	•
550							•	•
600							•	•
650							•	•
700							•	•
750							•	•

General Informations

How does a Heatpipe work?

A heatpipe comprises of a sealed evacuated metal envelope containing a porous capillary action wick lining and is charged with a working fluid. The preferred working fluid is usually high purity water or alcohol which exists as a saturated vapour inside the ves-

sel. When heat is applied to any point along the external surface of the heatpipe, the fluid inside the heatpipe evaporates at this point and then condenses again at any other points at fractionally lower temperatures. The working fluid is returned to the evaporator area by capillary forces developed in the capillary wick lining. In so doing, the latent heat capacity of the working fluid is utilised to effect a very efficient energy transfer, with only a very minimal internal thermal resistance.

Miba Super Thermal Conductors are engineered to very exacting standards to achieve superb thermally conductive performance properties. STCs enable large quantities of heat to be transmitted with only minimal thermal resistance from heat source to suitable engineered heatsinks.

Furthermore Miba STCs provide:

- Extremely High Thermal Conduction
- Fast Response to Thermal Loading
- Silent Operation
- Highly Reliable
- No Moving

Drawing

