



# Slim Heat Pipe and Vapor Chamber

**Slimmer, lighter, cooler!**

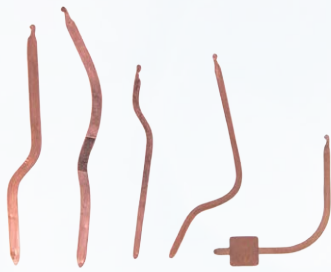
Delta's Slim Thermal Solution is your best choice for electronic portable devices, such as smartphones, tablets, AR, VR, drones and etc.

Slim heat pipe and vapor chamber can transfer heat instantly through liquid-vapor phase exchange in a limited space.

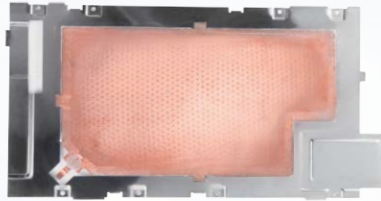
With in-house thermal technology and precision manufacturing capability, Delta provides highly customized thermal solution to our customers.

[www.delta-fan.com](http://www.delta-fan.com) | [dcfansales.us@deltaww.com](mailto:dcfansales.us@deltaww.com)

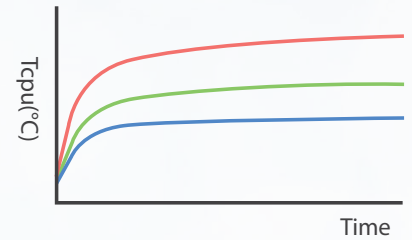
 **DELTA**  
Smarter. Greener. Together.



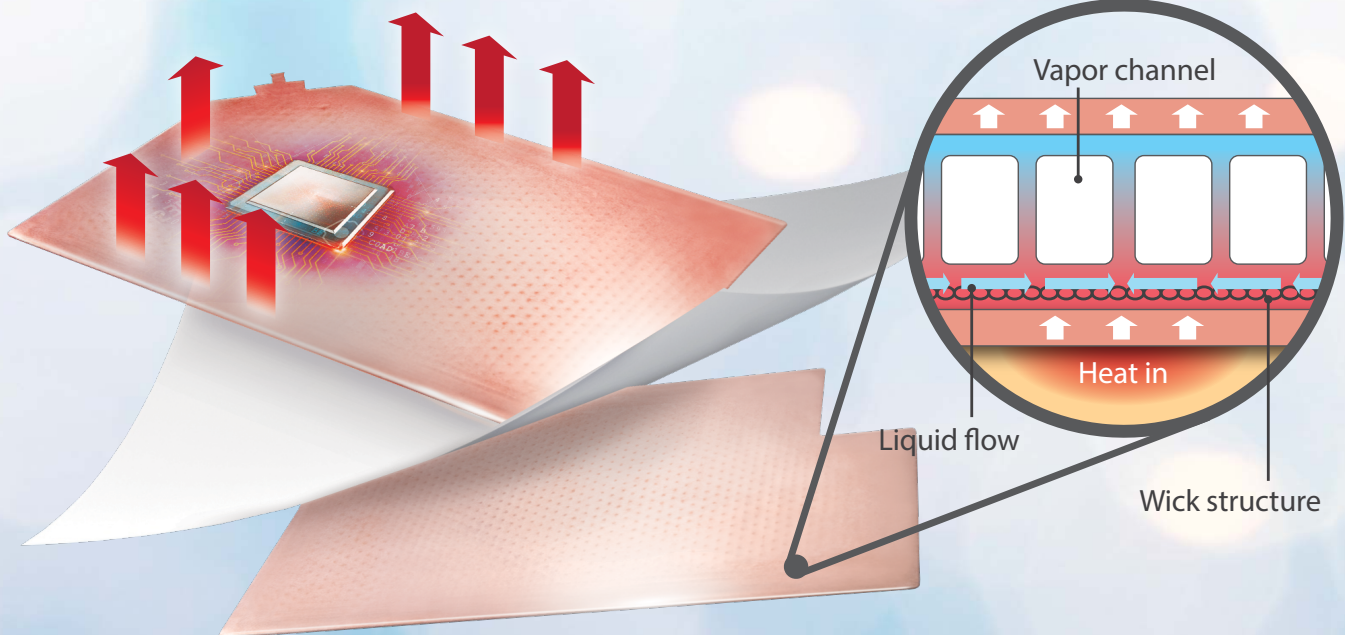
- Ultra Slim Heat Pipe
- Transfer heat via pipe
- Slim to 0.35mm
- Heat carrier up to 7 Watts



- Ultra Slim Vapor Chamber
- Heat spreader
- Slim to 0.30mm
- Heat carrier up to 10 Watts



- Traditional solution
- Slim H/P solution
- Slim VC solution



### General design guidelines:

| Ultra slim heat pipe |                |             |                   |
|----------------------|----------------|-------------|-------------------|
| Diameter (mm)        | Thickness (mm) | Length (mm) | Heat Capacity (W) |
| 2                    | 0.35~1.0       | 50~200      | 3~5               |
| 3                    | 0.40~1.0       | 50~200      | 4~7               |
| 4                    | 0.5~1.0        | 50~200      | 5~8               |
| 5                    | 0.6~1.0        | 50~200      | 6~15              |
| 6                    | 0.6~1.0        | 50~300      | 6~30              |
| 7                    | 0.8~1.3        | 80~350      | 10~30             |
| 8                    | 0.8~1.3        | 80~350      | 15~40             |
| 10                   | 1~1.3          | 80~350      | 20~60             |

| Ultra slim vapor chamber |                            |                            |                               |
|--------------------------|----------------------------|----------------------------|-------------------------------|
| Thickness (mm)           | Size (mm) (Length x Width) | Heat Capacity With Fan (W) | Heat Capacity Without Fan (W) |
| 0.35                     | 100 x 60                   | 4~6                        | 3~5                           |
| 0.4                      | 120 x 60                   | 5~8                        | 3~5                           |
| 0.5~0.7                  | 160 x 60                   | 10~15                      | 5~7                           |
| 0.7~1.0                  | 180 x 90                   | 15~20                      | 7~10                          |