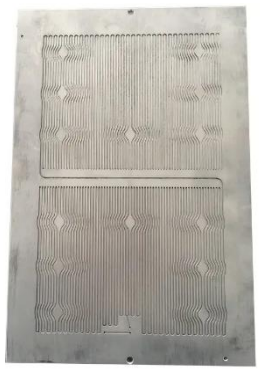
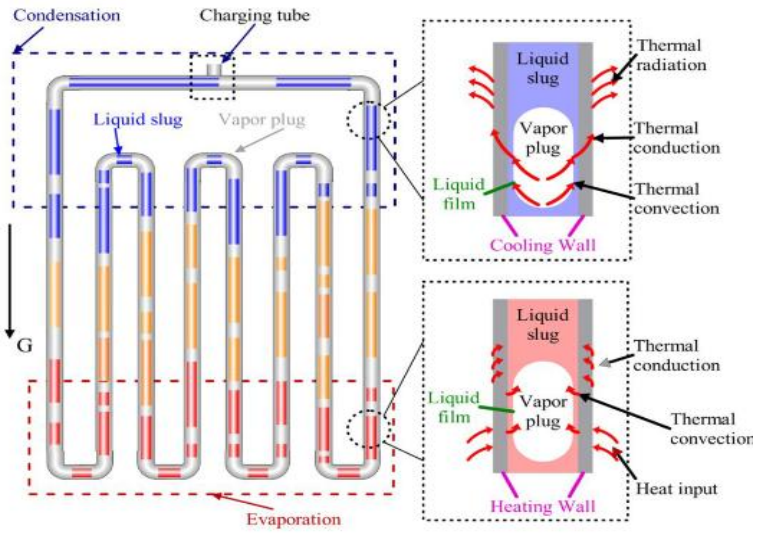
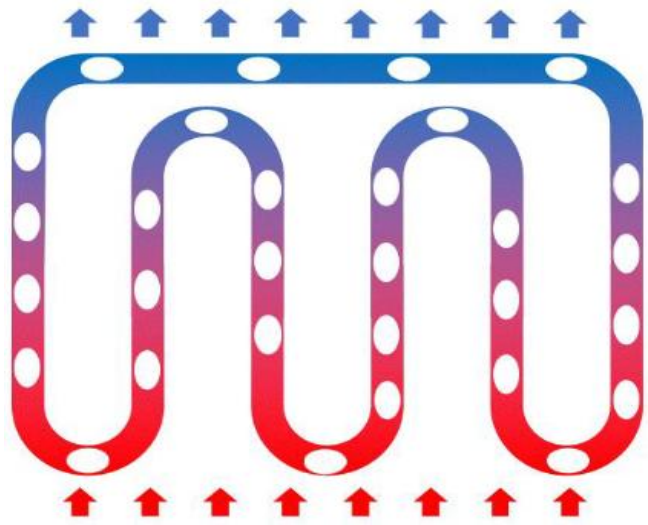
Flat Pulsating Heat Pipe (PHP)



- **Excellent Anti-Gravity Properties, higher power = better anti-gravity performance.**
- **PHP has light weight and low thermal resistance compared to copper vapor chambers.**
- **Can be bent to required specifications with no impact on thermal conductivity**
- **Supports more than 1000-Watt heat dissipation.**
- **Heat Conductivity up to 20000 W/m. K**
- **Pressure driven cooling, PHP can operate in micro and hyper gravity with orientation of the pipes having no effect to performance.**

Unique Characteristics | Applications | E-Catalogue





Performance Comparison					
Material	**Density [g/cm³]**	**Heat Transfer**	**Thermal Conductivity [W/m.K]**	**Heat Flux [W/cm²]**	**Min Thickness**
Aluminium	2.7	3D	~210	N/A	N/A
Copper	8.9	3D	~400	N/A	N/A
Graphite	2.3	2D	~2200 Laterally	N/A	N/A
Heat Pipe	~3.5	1D	~5000	75	3mm
Copper VC	4~7.6	2D	~10000	750	3mm
PHP	**1.1~2.4**	**2D**	**~20000**	**>1000**	**<1mm**

Applications – Automotive, Digital Displays, Solar Technology, Communication devices.

ANNOTATION

All specifications shown herein are typical values and are not guaranteed. It is recommended to test in the application for suitability.