

Heat Pipes

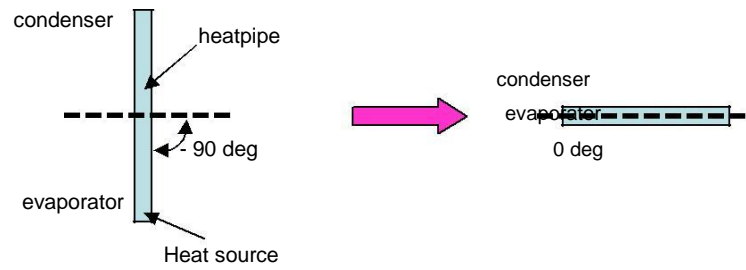


- Copper heat pipes, pure water filled for operation between +5 degC and 110 degC.
- Various wick structures offered, Screen mesh, Grooved, Sintered and composite (G+S)
- Low thermal resistance for transportation of heat from hot source to exchanger. Heat pipe can be incorporate into a block and fix a finned structure (or heat sink) to allow effective heat removal.
- Thermal resistance of pipe taken at 70degC working temperature (adiabatic), under horizontal orientation, evaporator section 15mm, and condensation section 60mm

Part Number	Structure	Length	Original Diameter	Thickness	Thermal resistance of pipe R _{pipe} in (K / W)	Operating Max Power (W)
00C93390101	Sintered	100	5	5	0.02 – 0.04	40
00C93400101	Sintered	150	6	6	0.02 – 0.03	65
00C93410101	SM	150	4	2	0.65 – 0.90	15
00C93420101	SM	200	6	2	0.35 – 0.60	30
00C93430101	Groove	100	5	2.5	0.03 – 0.06	30
00C93440101	Groove	150	6	6	0.02 – 0.03	65
00C93450101	Groove	150	8	2.5	0.003 – 0.05	15
00C93460101	G+S	200	6	3.0	0.003 – 0.008	40
00C93470101	G+S	150	8	4.5	0.003 – 0.015	70
00C93480101	G+S	300	8	8	0.002 – 0.007	65

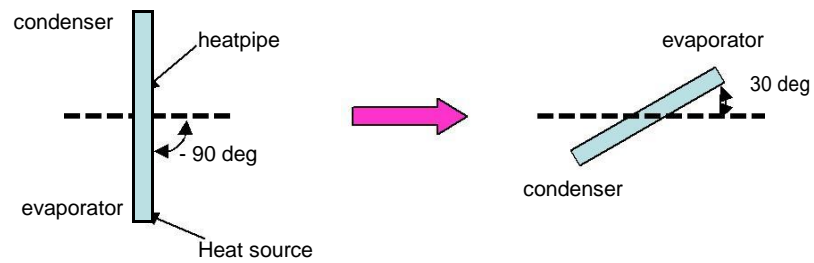
Design Guidelines

(1) Groove heatpipe



- The heatpipe performance is without change from -90 deg to 0 deg. Larger than 0 deg (i.e. evaporator is higher than condenser), the performance of grooved pipe will degrade 50%.

(2) Mesh heatpipe



- Larger than 30 deg, the performance of mesh pipe will degrade 50%.

(3) Sintered Powder heatpipe

- The orientation has no impact on the sintered powder heatpipe performance.