MIKROS technologies

US PATENT:20110226448A1

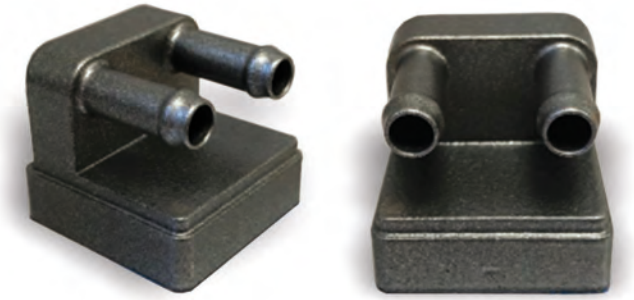
Our Products

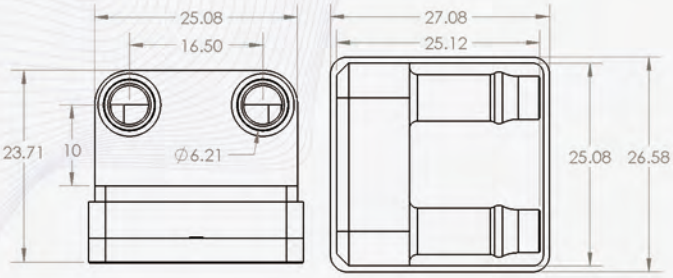
M1 Cold Plate - 25mm x 25mm

More power to you.

Microchannel Liquid Cooling

The Mikros M1 cold plate is optimized for high heat flux microchips with low thermal resistance and pressure drop. Its 25 x 25mm footprint cools standard microchip sizes and can be used to evaluate Mikros technology for custom applications.

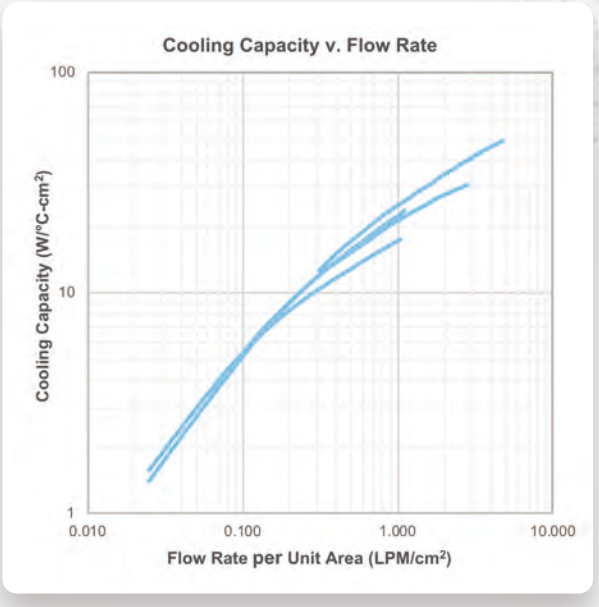




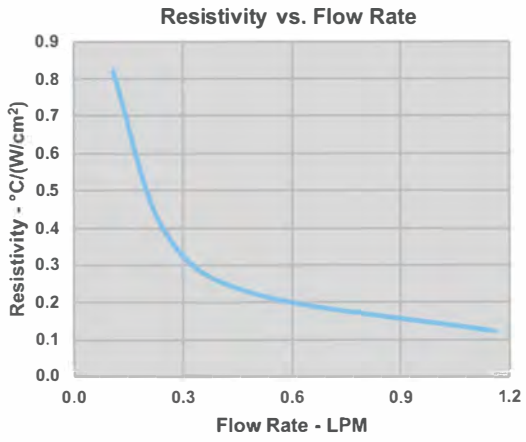
Mikros M1 Cooling Advantage

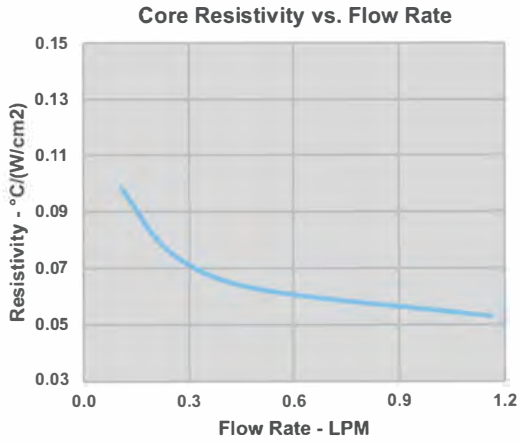
- **High Cooling Capacity** with M1 core R* as low as 0.045 C-cm2/W. Others as low as 0.02 C-cm2/W
- **Low Pressure Drop** near 1 psi at moderate flow rates
- **High Cooling Value** per Watt-dissipated
- **High Reliability** with no cooling capacity decrease over 15 years of endurance testing
- **Tailored Cooling** with 0 deg temp gradients or preferential cooling areas in custom applications

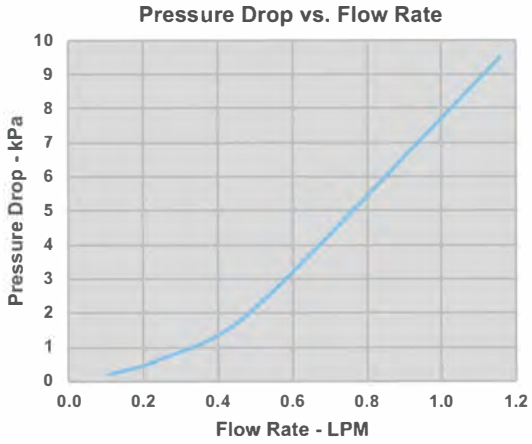
To Order: Info@mikros.net

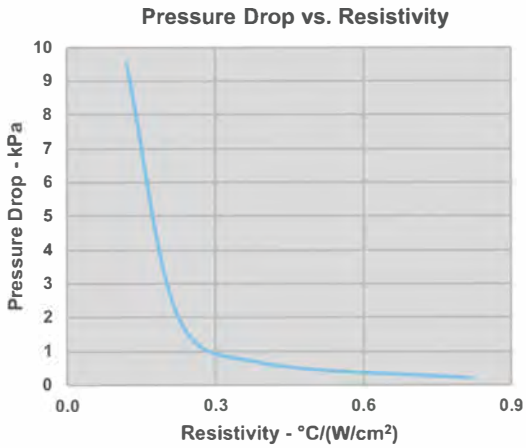


M1 Performance Characteristics with Water









$$R^* = Resistivity \equiv \frac{T_c - T_{in}}{q \,/\, A}$$

$$R^* = R^*_{core} + R^*_{flow}$$

$$R^*_{flow} = \frac{A}{\rho \cdot c_p \cdot Q}$$

T_c	=	cold plate surface temp
T_{in}	=	fluid inlet temp
A	=	active area – 25 mm x 25 mm
q	=	heat flow
R^*_{core}	=	core resistivity
R^*_{flow}	=	flow sensible heating resistivity
Q	=	water flow rate
ρ	=	density of water
c_p	=	specific heat of water