

Our Products

M1 Cold Plate

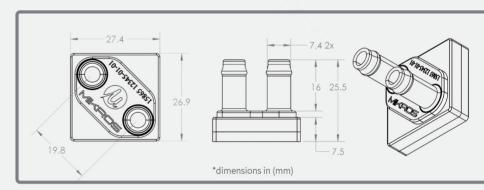
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Superior Cooling Power:

The Mikros M1 cold plate is optimized for high heat flux semiconductors. With high cooling capacity and low pressure drop, it can improve performance on existing systems or evaluate Mikros' cooling technology for custom development.







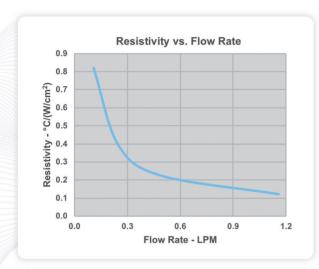
Mikros Cold Plate Technology

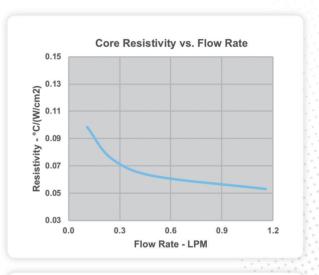
- **High Cooling Capacity** with M1 core R* as low as 0.045 C-cm2/W. Others as low as 0.02 C-cm2/W
- **Low Pressure Drop** near 1 psi at moderate flow rates
- High Cooling Value per Watt-dissipated
- **High Reliability** with no cooling capacity decrease over 15 years of endurance testing
- Tailored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

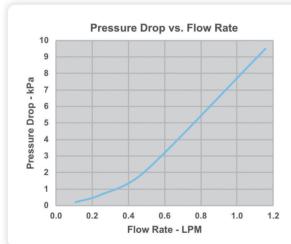


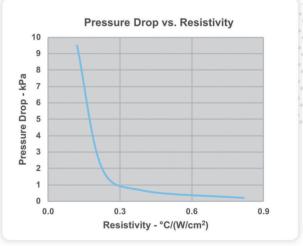


M1 Performance Characteristics with Water









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

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

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

$$T_c$$
 = cold plate surface temp

$$T_{in}$$
 = fluid inlet temp

$$A = \text{active area} - 25 \text{ mm x } 25 \text{ mm}$$

$$q$$
 = heat flow

$$R_{core}^*$$
 = core resistivity

$$R_{flow}^*$$
 = flow sensible heating resistivity

$$Q$$
 = water flow rate

$$\rho$$
 = density of water

$$c_{p}$$
 = specific heat of water