Aluminium Press Pack

LIQUID COOLED HEATSINKS

ALUMINIUM

Mersen aluminium Press Pack provides the maximum thermal performance in employing proprietary channeling techniques to optimize coolant velocity at low pressure drop while providing uniform temperature across the mounting surface for semiconductor reliability.

It is an effective and reliable solution. Liquid cooled systems work perfectly for power electronics components, especially when installed in a confined space.

Mersen is expert in vacuum brazing technology which ensure maximum reliability: guaranteed water tightness with no leak, robustness, no corrosion and excellent thermal performance. Result: a product sure to last decades!

FEATURES & BENEFITS

• 100% aluminium (alloy)
• High thermal performance (cost cutting with no derating of power module)
• Low pressure drop compared to similar product
• Homogeneous temperature distribution below semiconductor
• Very high pressure withstanding guarantee
• Perfect water tightness with no risk of leak
• All cold plates systematically pressure tested at 100%
• Vacuum brazing technology means no corrosion: flux free!
• Long life time: >20 years guaranted
• Options:
  - Surface coating
  - Tab for electrical connections
  - Fitting as per customer requirements

APPLICATIONS

• Cooling of any size of press pack semiconductor

STANDARDS

• Vacuum-brazing technology
• RoHS compliant
Aluminium Press Pack

THERMAL AND HYDRAULIC PERFORMANCES

Perfect homogeneous temperature distribution below semiconductor for high reliability

Semiconductor contact surface diameter: 85mm
Aluminium Press Pack

THERMAL AND HYDRAULIC PERFORMANCES

Semiconductor contact surface diameter: 90mm

![Graph showing thermal and hydraulic performances for a semiconductor contact surface diameter of 90mm.]

Semiconductor contact surface diameter: 100mm

![Graph showing thermal and hydraulic performances for a semiconductor contact surface diameter of 100mm.]

Semiconductor contact surface diameter: 115mm

![Graph showing thermal and hydraulic performances for a semiconductor contact surface diameter of 115mm.]

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THERMAL AND HYDRAULIC PERFORMANCES

Semiconductor contact surface diameter: 125mm

Dim. Flowrate (l/min) vs Pressure drop (mBar)

Semiconductor contact surface diameter: 135mm

Dim. Flowrate (l/min) vs Pressure drop (mBar)

DIMENSIONS

Contact view

<table>
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<th>Ø Component</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>110</td>
<td>110</td>
<td>70</td>
<td>Ø Inlet / Outlet + 5 mm</td>
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