

Air Cooled Fabfin[®] Heatsink

The first patented “glueless technology” air cooled

Fabfin is a fabricated air cooled heatsink with a height-to-fin spacing ratio greater than an extruded section. Fabfin can be supplied essentially of any size where a multitude of aluminum fins of varying heights and thickness are attached by a swaging process to an aluminum base plate of variable thickness, length and width, on four standard fin spacings. These standard spacings are designated as an FF (8.51 mm), DF (6.86 mm), AF (5.49 mm), or MF (3.43 mm) series. Typical alloy is 6063 for both fins and base plate. Finishes are numerous. No glue is used in the process.

Performance can be modeled within R-Tools.

Features/Benefits:

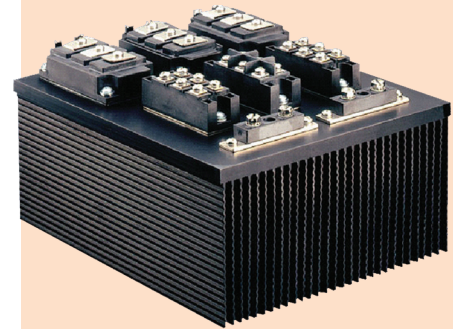
- Fabricated
- Multiple fins joined to baseplate by swaging process
- Metal to metal construction. Al/Al Cu/Al Cu/Cu
- Immensely rugged
- No epoxy/glue used in fabrication process
- No thermal barrier at fin to baseplate join
- Fin height to spacing ratio much greater than extruded section
- -40°C to + 350°C storage and operating range
- Capable of withstanding extensive vibration
- Tongue and groove construction
- Baseplates can be welded together with fins attached

Highlights:

- Essentially any width, length or height
- Any fin height to spacing ratio up to 46:1
- Anodize finish
- Chromate finish: Hexavalent + Trivalent
- Electroless nickel finish
- Selective use of copper fins

Applications:

- Communications
- Industrial controls
- Medical, Military
- Motor drives
- Power controls
- Solar energy
- Transportation
- Wind energy



Performance:

- Typically 15% lower thermal impedance than a glued solution
- Can be modeled on R-Tools