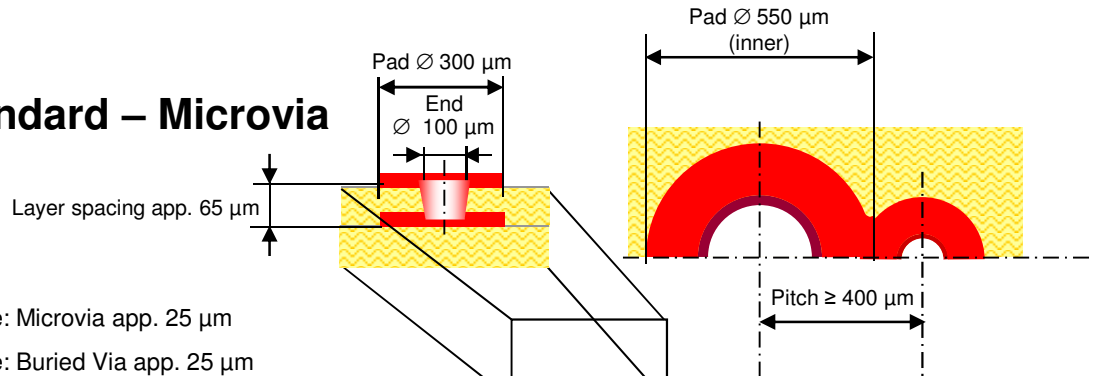




Thermal Management Standard Design Rules

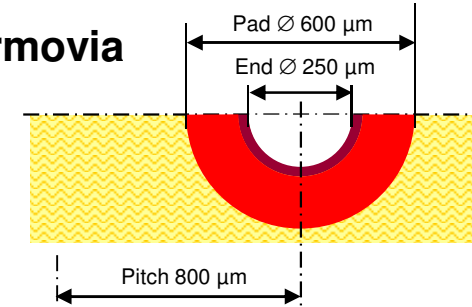


Standard – Microvia

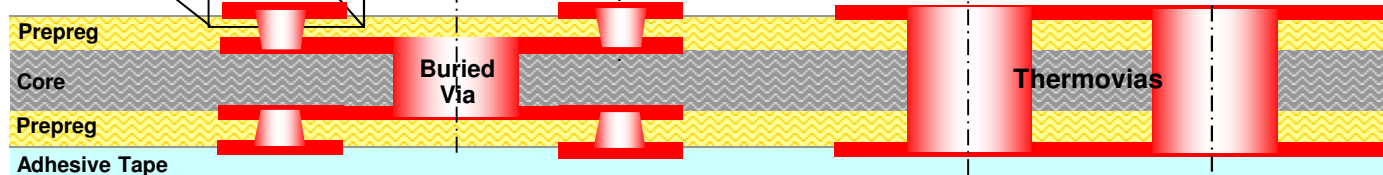


Copper in hole: Microvia app. 25 µm
 Copper in hole: Buried Via app. 25 µm

Thermovia



Copper in hole: Thermovia app. 25 µm



Assembly

Single sided SMD assembly

THT-components are possible upon consultation

Heatsink Element

Thickness 1.0 bis 3.0 mm (other thicknesses are possible after agreement)
 Material AlMg3

Soldering process

Reflow-soldering with convection and condensation.

Due to its excellent heat dissipation, the temperature control of the soldering process must be appropriately adjusted.

That usually means longer pre-heating and maybe higher temperatures.

Printed circuit board

Pcb thickness min. 0.40 mm
 Copper layout bonding side Copper distribution on heatsink side should be maximum possible. Important: this layer should be completely coated with soldermask.
 Copper thickness Typically 35 to 55 µm on outer layers. Base copper to inner layers max. 70 µm

Adhesive

Adhesive tape thickness 50 µm ; 190 µm
 Dielectric breakdown 0.5 kV ; 3.0 kV
 Bonding process Three identical holes are required for the registration of the PCB to the heatsink. Ideally they should be arranged in an L- shape (±0.25 mm positional tolerance).