



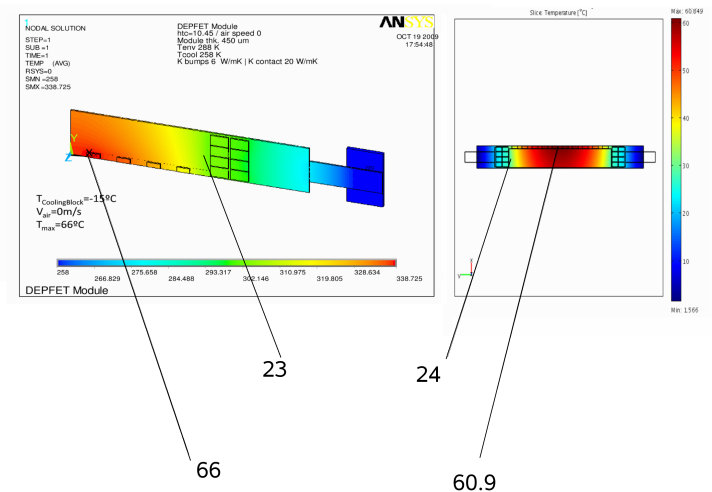
Cross-check thermal simulations

Oksana Brovchenko

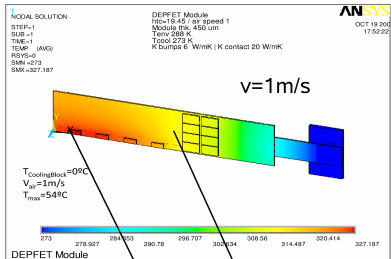
Institut für Experimentelle Kernphysik, Universität Karlsruhe (TH)

Evo meeting, 3.11.2009

T-shape



T-shape with air flow

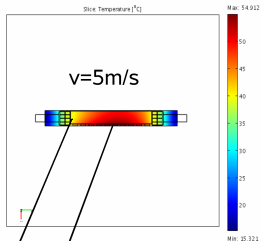


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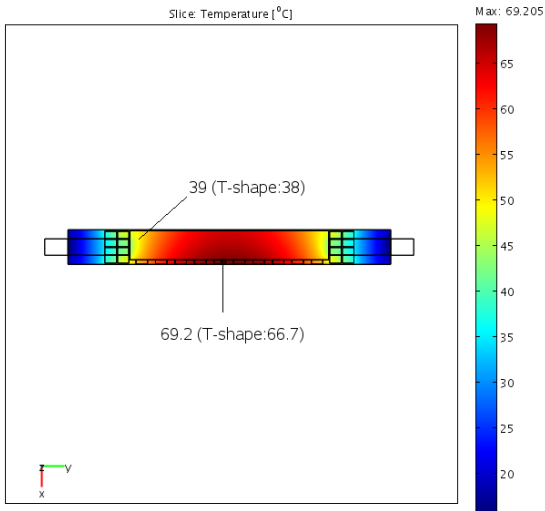
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54.9



Straight diamond





- for short diamond bridge (<10 mm) $\approx -10^{\circ}\text{C}$ cooling temperature may be enough
- center of the sensor has to be cooled by air (lower air temperature or higher air velocity)
- good accordance for conductive cooling between Valencia and Karlsruhe
- straight piece of diamond nearly as good as T-shape
- similar effect of air flow in Valencia and Karlsruhe, but for different values \rightarrow air flow need to be studied more carefully