



Figure 1: Drawings of the detector assembly and the microfluidic device (1). A: front view (dimensions in mm); B: exploded view. Spacer (4) ensures the alignment of the sample chamber with the constrictions on the PCB planes. In A, PCB plane 5 is hidden to show the orientation of 1 with respect to PCB plane 3. Thickness of each of the PCB planes is 1.52 mm and the copper layers on the PCBs is  $35\ \mu\text{m}$ . Both the microfluidic device and the spacer are made from PMMA and have thickness of 0.9 mm and 1 mm respectively.