

## Silicon-on-Insulator-on-Cavity-Structured Micropressure Sensor

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A new design of a micropressure sensor using stress concentration structure, which is fabricated on a silicon-on-insulator (SOI)-on-cavity substrate, is presented in this paper. High sensitivity and good linearity can be achieved simultaneously, and it is fabricated with a larger process tolerance than that by a traditional process. Moreover, it has potential applications in high-temperature environments. Mechanical analysis results and design rules of the structure based on finite element analysis are also presented.

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