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# DESIGN CONSIDERATIONS FOR THE DEVELOPMENT OF MEMS SENSOR FOR MEASUREMENT OF PRESSURE FOR AUTOMOBILE SYSTEM

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## Abstract

This paper gives a very brief overview of microelectromechanicalsystem pressure sensors, a field which is relatively new but has already filled bookshelves with meters of journal and conference papers and which has attracted great activity in the past 10-15 years. Micromechanical sensors have become possible due to the development of micromachining technologies and many of the concepts and principles on which the sensors rely can only be used courtesy of this technology. Piezoresistive pressure sensors convert input pressures to electrical outputs to measure pressure, force and airflow. These measurements are used to control the automotive system. In this paper , the Kamer method is used to find the number of terms used in determination of deformation and sensitivity of the diaghragm.

Key Words : *MEMS Sensor, Kamer method , pressure , sensitivity, maximum stress.*