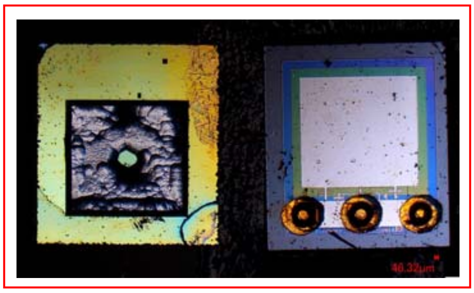
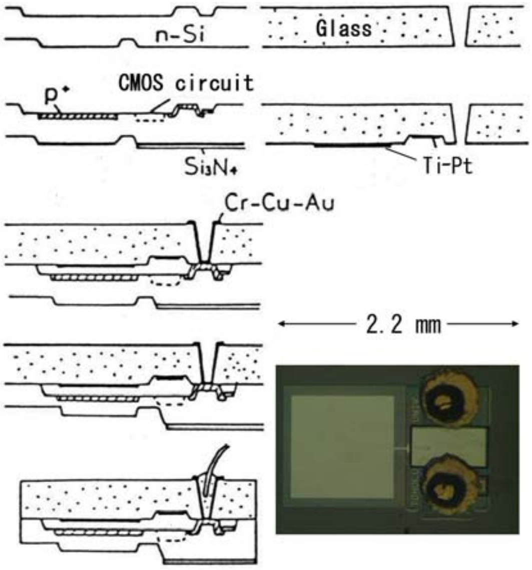
A5

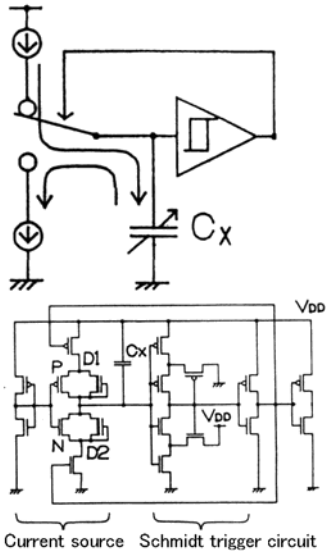
Integrated Capacitive Pressure Sensor

(Tohoku Univ. — Toyda Machine Works)

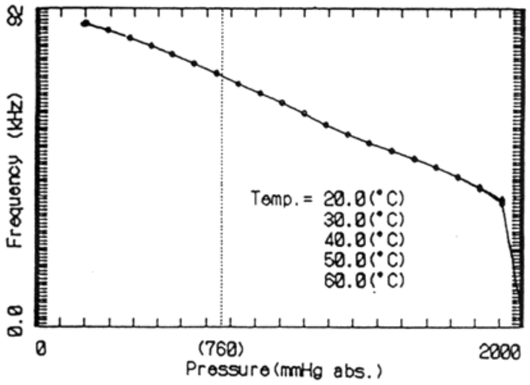




Fabrication process



Circuit



Characteristics

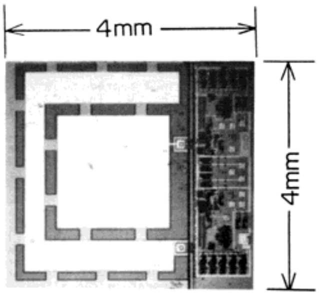
For low pressure measurement

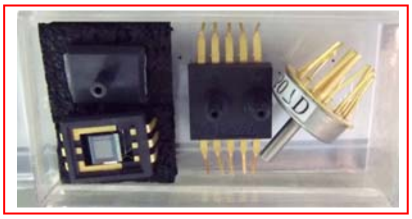
10mmH2O～300mmH2O

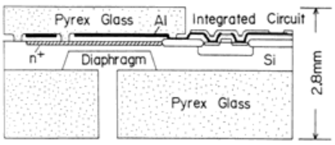
Frequency and analog output

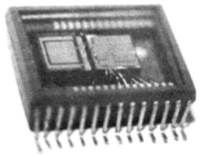
TOYODA

Toyoda Machine Works, LTD.



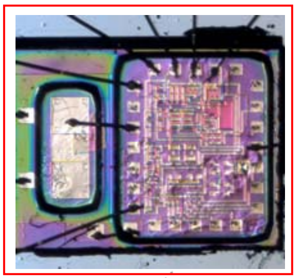




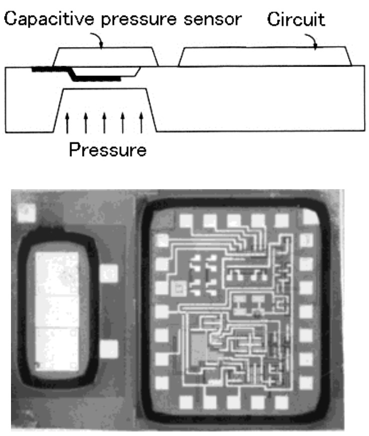


Monolithic capacitive pressure sensor

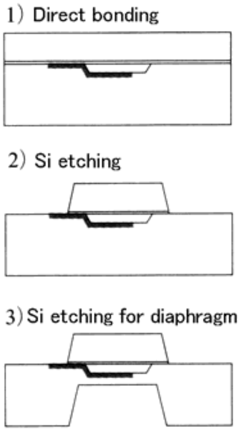
Reference : Y.Matsumoto, S.Shoji and M.Esashi, A Miniature Integrated Capacitive Pressure Sensor, Extended Abstracts of the 22nd International Conference on Solid State Devices and Materials (1990) pp.701–704



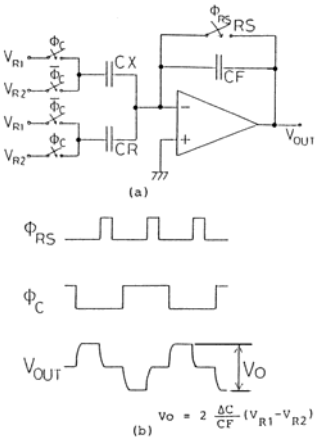
Integrated Capacitive Pressure Sensor by Si Direct Bonding



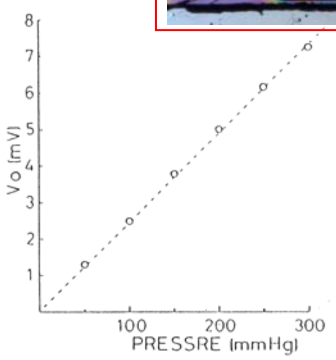
Structure and photograph



Fabrication



Circuit



Characteristics

Reference : S.Shoji, T.Nisase, M.Esashi and T.Matsuo, Fabrication of an Implantable Capacitive Type Pressure Sensor, The 4th Int. Conf. on Solid State Sensors and Actuators (transducers' 87), (1987) pp.305–308