

Abstracts

Wireless IDT ice sensor

K.A. Jose, G. Sunil, V.K. Varadan and V.V. Varadan. "Wireless IDT ice sensor." 2002 MTT-S International Microwave Symposium Digest 02.2 (2002 Vol. II [MWSYM]): 655-658 vol.2.

This paper presents the design and performance evaluation of a Wireless IDT Ice Sensor for sensing the phase change from water to ice and hence to detect and monitor the ice formation at a remote location. The sensor is based on the principle of shear horizontal waves and its undamped nature in the presence of a liquid. The frequency shift due to the phase change of water to ice is measured wirelessly and it is observed that, the sensor has potential applications for ice detection in airplane wings.

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