Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Temperature Dependence of Gigahertz-Range Ultra-High Frequency Micromechanical Resonators JOSEF-STEFAN WENZLER, TYLER DUNN, DIEGO GUERRA, PRITIRAJ MOHANTY — We report measurements of bulk mode resonators in the ultrahigh frequency range up to 4 GHz. The devices are fabricated with a stack of materials and actuated using piezeoelectric technique. Typical dimensions of these resonators are 100 μm in length and width and 10 μm in thickness. The temperature dependence of mode frequencies and quality factor Q are investigated for temperatures ranging from 0.3 K - 400 K.

Josef-Stefan Wenzler

Date submitted: 21 Nov 2008 Electronic form version 1.4