

## GaAs Monolithic Circuits Mounted Over High Q Dielectric Resonators

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The coupling of a dielectric resonator through coplanar waveguides is experimentally studied and the feasibility of very selective microwave circuits, where the resonator is placed below the active and passive circuit components, is demonstrated. The design and the operation of high-stability feedback-type coplanar oscillators are reported. The possibility of mounting a monolithic chip over a high-Q dielectric cavity, avoiding unwanted resonator coupling anywhere in the circuit, is demonstrated. This allows the sealing of the overall circuit in a practical low-size case. Finally, the performances of a test monolithic chip carrying two different oscillators are stressed.

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