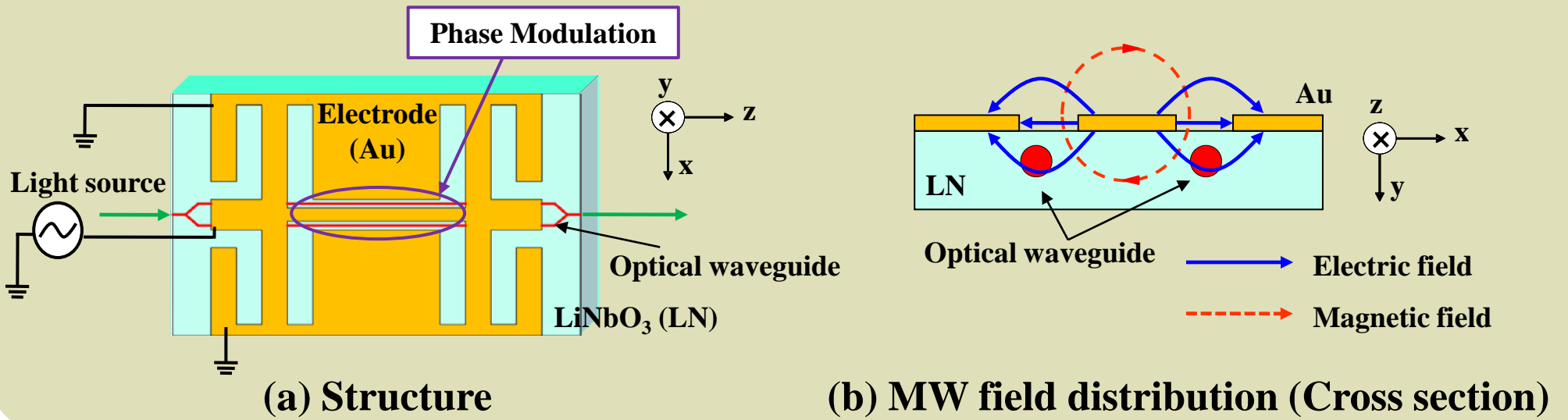


# Resonant type microwave E/O modulator

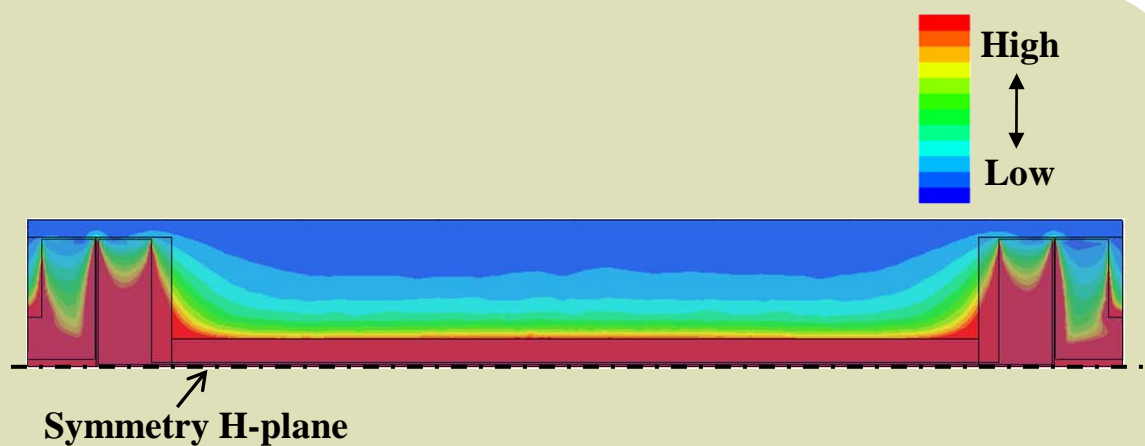
## Mach-Zehnder E/O modulator using a CPW resonator



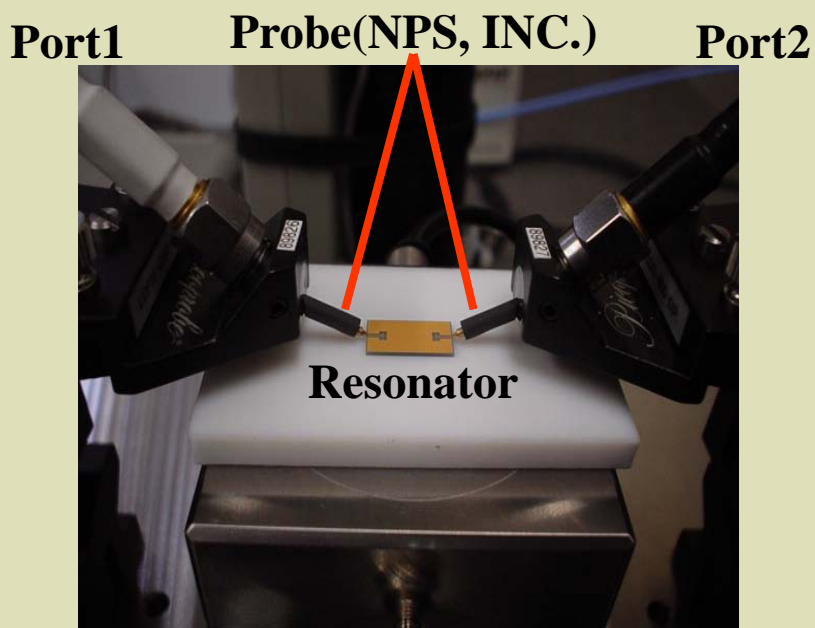
## Designed CPW resonator



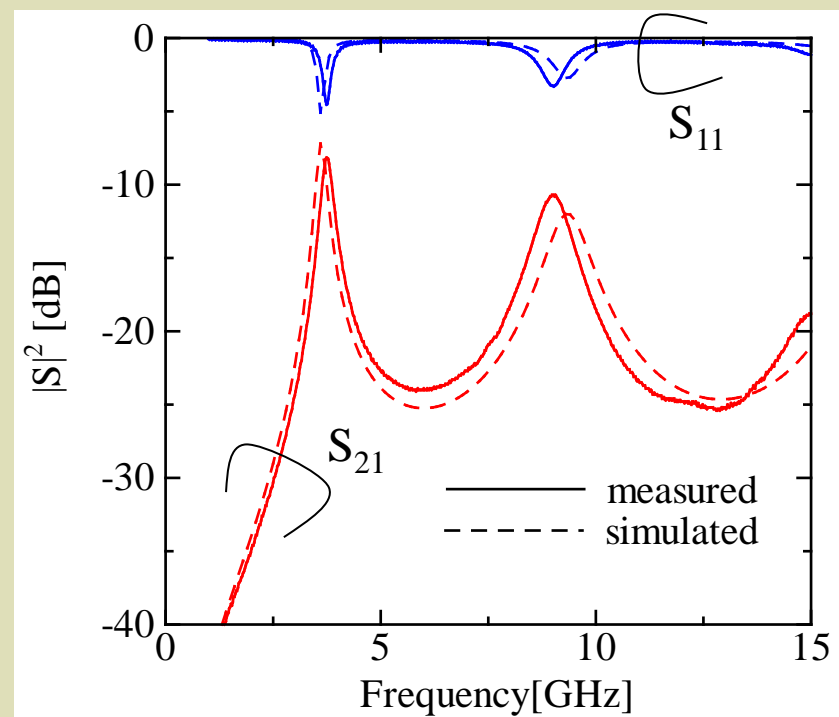
(a) Fabricated resonator



(b) Electric field distribution (4GHz)

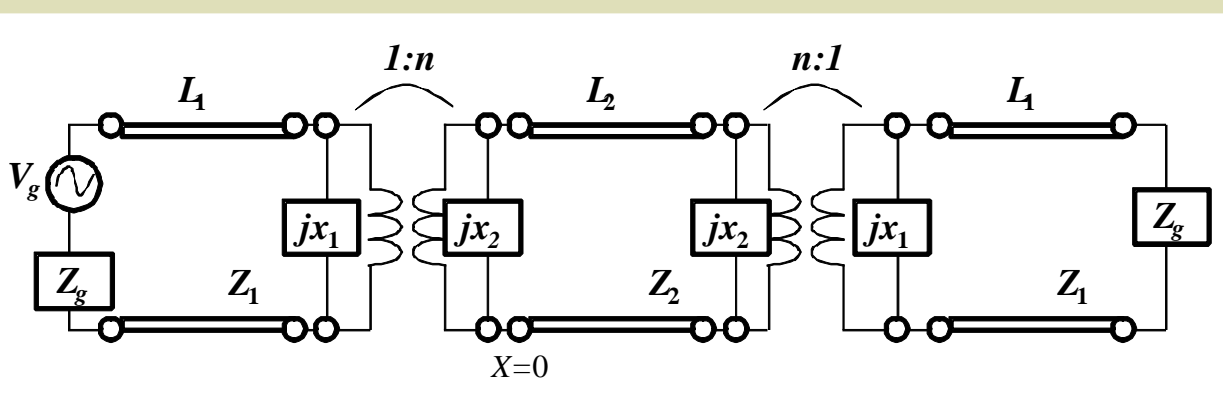


(c) Experimental apparatus

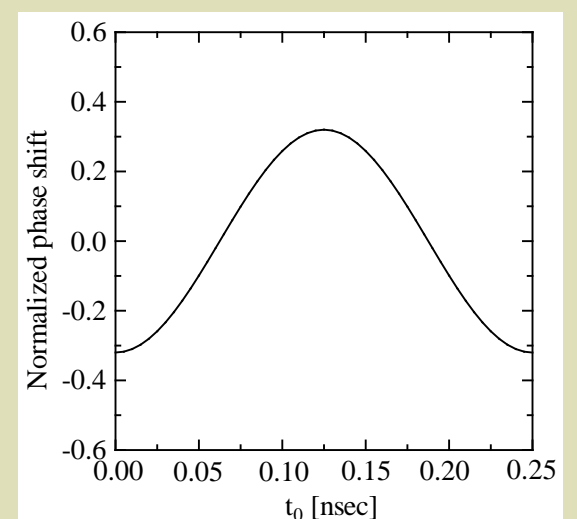


(d) Frequency response

## Calculation of Phase Modulation



(a) Distributed constant equivalent circuit



(b) A calculated result on phase modulation