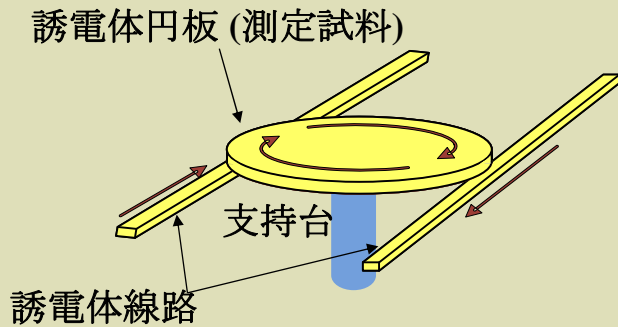
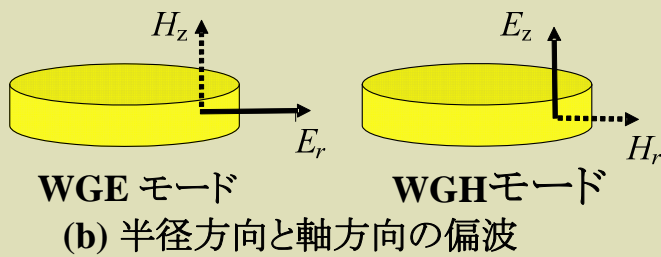


# ミリ波帯における誘電体基板の複素誘電率測定②

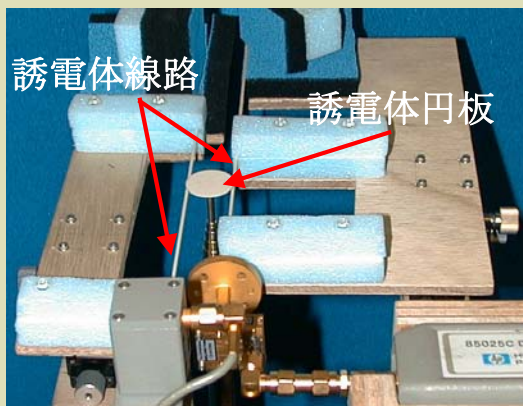
## WG共振器法



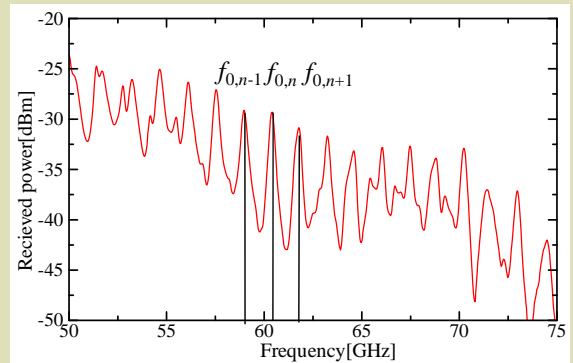
(a) WGモード誘電体円板共振器



(b) 半径方向と軸方向の偏波



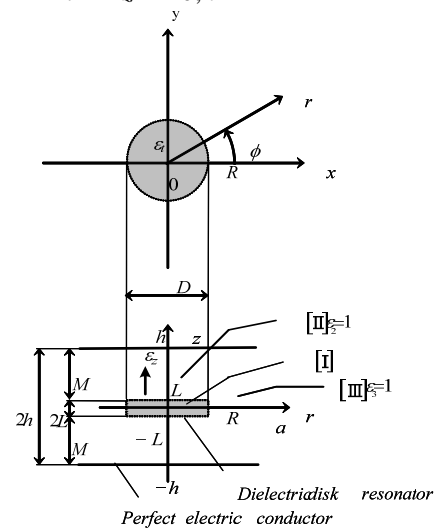
(c) 測定システム



(d) 共振周波数

比誘電率  $\epsilon_t, \epsilon_z$

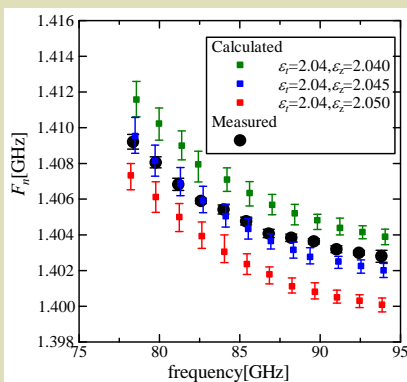
$$\det H(\epsilon_t, \epsilon_z; f_{0,n}, n, D, L, h) = 0$$



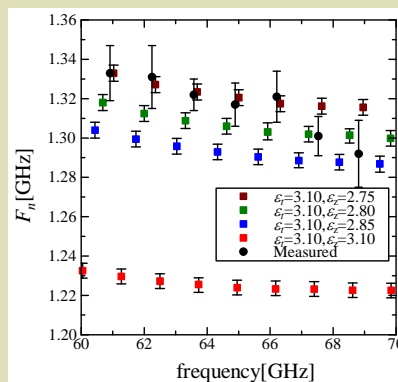
WGモード共振器の  
モードマッチング法解析構造

## 測定結果

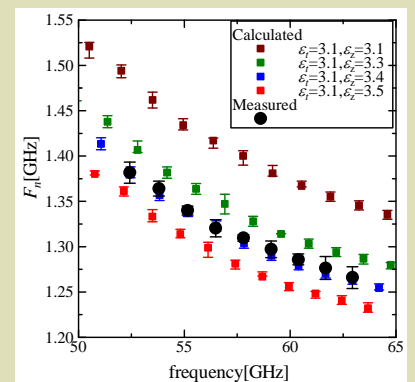
$$F_n = \frac{f_{0,n+1} - f_{0,n-1}}{2}$$



PTFE



LCP系基板



PS系基板

(a) 面方向、軸方向の比誘電率  $\epsilon_t, \epsilon_z$

