ABSTRACT

A Power Combiner 4:1 at frequency of 9,37 - 9,43 GHz for RADAR X-Band have been designed and realized. This Power combiner woke up by cutting of transmissions channels microstrip which in the form of two-stages transformer λ/4 (two section quarter-wave transformer) with each the characteristic impedance have been calculated so that match can with transmission channel of 50Ω.

Caused by deviation of dimension when peng-etchingan so that power this combiner only can yield Insertion Loss maximum 11.241 decibel at port 3. Insulation of a minimum of equal- 6,376 decibel, Return Loss a minimum of equal to 10,032 decibel namely with VSWR maximum equal to 1.919985.

At simulation got by value Insertion Loss maximum 6,52966 decibel. Insulation of a minimum of equal- 19,5383 decibel, Return Loss a minimum of equal to 31,1418 decibel namely with VSWR maximum equal to 1.040045

Key word : *Power Combiner*, Wilkinson