Abstracts

EM-ANN modelling and optimal chamfering of 90/spl deg/ CPW bends with air-bridges

P.M. Watson and K.C. Gupta. "EM-ANN modelling and optimal chamfering of 90/spl deg/ CPW bends with air-bridges." 1997 MTT-S International Microwave Symposium Digest 3. (1997 Vol. III [MWSYM]): 1603-1606.

Electromagnetically-trained artificial neural network (EM-ANN) models for coplanar waveguide (CPW) 90/spl deg/ bends with air-bridges are presented. The optimal chamfer is determined for a conventional CPW bend where both the slot and strip are chamfered. Also, a novel compensated CPW bend is introduced where only the strip is chamfered. Optimum value of this chamfer is found to be the maximum chamfer allowed by air-bridge placement. This novel compensated CPW bend is shown to reduce the return loss from that in the conventional optimally chamfered CPW bend by 3 to 7 dB.

❑ Return to main document.