Abstracts

Discussion on Optimum Bead Spacing (Correspondence and Author's Reply)

J. Reed and D. Dettinger. "Discussion on Optimum Bead Spacing (Correspondence and Author's Reply)." 1959 Transactions on Microwave Theory and Techniques 7.4 (Oct. 1959 [T-MTT]): 477-477.

Mr. Dettinger’s article on the optimum spacing of bead supports in coaxial transmission lines is too sanguine as to the performance which will result. He states that an array of M beads arranged according to his theory will result in a total reflection coefficient of no more than /spl radic/M Gamma/sub 0/ where Gamma/sub 0/ is the reflection of one bead. In his Fig. 5 he shows a chart of the reflection of four beads equally spaced and the reduced reflection which he hopes will result from application of his rule. The case where there are four beads will result for equal spacing in a maximum value of 4Gamma/sub 0/, and from his theory for progressive spacing it should be possible to arrange the beads so that the maximum possible reflection is only 2Gamma/sub 0/.

❑ Return to main document.