Abstracts

Three-dimensional masterslice MMIC on Si substrate (1997 [RFIC])

I. Toyoda, K. Nishikawa, T. Tokumitsu, K. Kamogawa, C. Yamaguchi, M. Hirano and M. Aikawa. "Three-dimensional masterslice MMIC on Si substrate (1997 [RFIC])." 1997 Radio Frequency Integrated Circuits (RFIC) Symposium 97. (1997 [RFIC]): 113-116.

This paper describes Si based three-dimensional MMIC technology. This technology greatly improves the operating frequency of Si MMICs up to the Ku-band and makes them competitive with GaAs MMICs in the higher frequency band. An X-band amplifier and highly integrated single-chip receiver using Si bipolar transistors are demonstrated to highlight the advantages of the Si 3-D MMIC technology. Cost estimation compared with conventional GaAs 2-D MMICs is also discussed.

❑ Return to main document.

Click on title for a complete paper.