Abstracts

A compact V-band 3DMMIC single-chip down-converter using photosensitive BCB dielectric film

K. Nishikawa, S. Sugitani, K. Inoue, K. Kamogawa, T. Tokumitsu, I. Toyoda and M. Tanaka. "A compact V-band 3DMMIC single-chip down-converter using photosensitive BCB dielectric film." 1999 MTT-S International Microwave Symposium Digest 99.1 (1999 Vol. I [MWSYM]): 131-134 vol.1.

A high-density MMIC V-band down-converter that employs the masterslice 3DMMIC technology and photosensitive BCB dielectric film, is presented. The down-converter is structured using an 8/spl times/2 master array in a 1.84 mm/spl times/0.87 mm chip. A down-converter MMIC with H-MESFET with f/sub max/ of 130 GHz demonstrates the gain of 19.3 dB and image rejection ratio of above 18 dB over the frequency range of 56.5 GHz to 59.5 GHz; its associated gain-density is five times higher than that of conventional MMICs.

❑ Return to main document.