Abstracts

An ultra miniature isolator with broadband isolation using ferrite gyrator

T. Okada, T. Makino, S. Shinmura, S. Hino, T. Nakada and H. Asai. "An ultra miniature isolator with broadband isolation using ferrite gyrator." 2001 MTT-S International Microwave Symposium Digest 01.2 (2001 Vol. II [MWSYM]): 1183-1186 vol.2.

An ultra miniature isolator, which we call a "buffer device", characterized in broadband isolation and with no battery power consumption, is developed. It consists of a ferrite plate and two wire windings. It provides an insertion loss of 1.5 dB at 2.52 GHz and an isolation of 20 dB or more over a frequency range of DC through 3.0 GHz. The size of the buffer devices is only 3.2/spl times/2.5/spl times/1.7 mm/sup 3/. It is designed to replace power consuming buffer amplifiers in CDMA, TDMA, and W-CDMA mobile phone handsets.

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