

Abstracts

A Novel Three Phase-States Phase Shifter

*K. Nakahara, S. Chaki, N. Andoh, H. Matsuoka, N. Tanino, Y. Mitsui, M. Otsubo and S. Mitsui.
"A Novel Three Phase-States Phase Shifter." 1993 MTT-S International Microwave Symposium
Digest 93.1 (1993 Vol. 1 [MWSYM]): 369-372.*

A novel compact phase shifter switching three phase-states has been demonstrated. The novel phase shifter circuit is constructed by adding switching FETs to a conventional single-stage 2-phase-states phase shifter. A conventional 3-stage 2-phase-state phase shifter can be replaced by the novel 2-stage 3-phase-state phase shifter. The total chip size of the newly developed phase shifter is reduced to 2/3 of the conventional one. This paper reports on the design and the experimental results of the novel reflection and loaded-line types phase shifter MMICs.

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