Abstracts

Design and Performance of Wide-Band HDT-Type SAW Filters with Low Loss and Improved Sidelobe Suppression

R. Weigel, B. Bader, G. Fischerauer and P. Russer. "Design and Performance of Wide-Band HDT-Type SAW Filters with Low Loss and Improved Sidelobe Suppression." 1993 MTT-S International Microwave Symposium Digest 93.3 (1993 Vol. III [MWSYM]): 1505-1508.

Wide-band low-loss SAW filters employing interdigitated interdigital transducers (IIDT's) suitable for cellular radio systems are presented. The filters were fabricated on 36° YX-LiTaO/sub 3/ substrates. The sidelobe suppression has been improved by withdrawal weighting techniques. A design method which optimizes the weighting functions and number of fingers has been worked out. In the 500 MHz band, fractional bandwidths of up to 5.2 % with passband ripples smaller than 1 dB were attained. Insertion loss and sidelobe suppression were at 1.8 dB and 23 dB, respectively.

❑ Return to main document.