Abstracts

Nano-Meter Electrode Fabrication Technology Using Electro-Chemical Effects and Applications to 15 GHz-Range Surface Acoustic Wave Devices

K. Yamanouchi, T. Meguro, Y. Wagatsuma, H. Odagawa and K. Yamamoto. "Nano-Meter Electrode Fabrication Technology Using Electro-Chemical Effects and Applications to 15 GHz-Range Surface Acoustic Wave Devices." 1994 MTT-S International Microwave Symposium Digest 94.2 (1994 Vol. II [MWSYM]): 1221-1224.

New lithography techniques of below 500A electrode width are proposed. The electrodes are fabricated by using extreme thin anodic oxidation films (AOF) composed at electro-chemical effects as resists. The results show the 750A width electrode using wet etching techniques and 1000A using dry etching techniques. The experimental results of unidirectional interdigital transducer (IDT) and 17 GHz-range Surface Acoustic Waves filters are demonstrated using the electrode width of 600A.

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