

Design, fabrication, and application of GHz SAW devices

U. Knauer, J. Machui and C.C.W. Ruppel. "Design, fabrication, and application of GHz SAW devices." 1997 MTT-S International Microwave Symposium Digest 1. (1997 Vol. I [MWSYM]): 1821-1824.

To meet the increasing demand of high performance filters in GHz radio communication systems, we have improved design techniques and fabrication processes. Different types of filters in the range of 1 to 3 GHz, a 2.45 GHz resonator with 18 dB insertion attenuation and a quality factor of 1500, wideband delay lines at 2.45 GHz, with 400 MHz and 600 MHz bandwidth, identification tags at 2.45 GHz, and ladder type bandpass filters for PCS and WLAN applications at 1.9 GHz and 2.45 GHz, were developed and manufactured. It will be shown, that these devices with submicron linewidth transducers down to 0.3 μm can be manufactured with tight process tolerances.

 [Return to main document.](#)