SURFACE ACOUSTIC WAVE FILTER

ABSTRACT

A SAW filter comprising a piezoelectric substrate and at least two filter tracks formed on the substrate, each having at least two IDT electrodes for input and output. The two filter tracks have substantially the same phase within a pass band, while it is substantially inverse-phased outside the pass band. For realizing the above-described conditions, input IDT electrode of one filter track is connected in parallel with input IDT electrode of the other filter track, while output IDT electrode of one filter track is connected in parallel with output IDT electrode of the other filter track. Furthermore, frequency values of said two filter tracks substantially coincide at a point 3dB lower from the peak transfer function value. Thus the above-configured SAW filter of the present invention is smaller in the overall size and offers a broad pass band and a steep attenuation characteristic.

Fig. 1