

Abstract

In a multiple-stage-connected multiple-mode piezoelectric filter unit having a single container 1 in which there are connected, in cascade, two multiple-mode piezoelectric filter elements comprising at least one piezoelectric substrate and two electrode groups each comprising a pair of input/output electrodes and a grounding electrode, the electrode pairs being formed on one side of the piezoelectric substrate with a predetermined gap provided and the grounding electrodes being formed on the other side of the piezoelectric substrate at positions respectively opposite to the electrode pairs, it is an object of the present invention to enhance the ability of preventing the two filter elements from being coupled with each other, thus facilitating the final adjustment thereof. Formed in a single container 1 are two piezoelectric substrates 2, 3 on each of which formed are a pair of input/output electrodes and a grounding electrode. All the electrodes except for the grounding electrodes 23, 33 on the piezoelectric substrates 2, 3 are respectively connected to connection terminals 11 to 16 independently formed on the container 1. The arrangement above-mentioned restrains the two piezoelectric filter elements connected in cascade to each other from interfering with each other. Thus, there is

obtained a small and highly-efficient multiple-stage-connected multiple-mode piezoelectric filter unit useful particularly for a portable communication device or the like.