
PHASE SHIFTER FOR ACTIVE NOISE DAMPENING SYSTEM

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Abstract

The article deals with the present-day trends in development of noise dampening systems, in particular active noise dampening systems. We consider the main principles of active noise dampening. First, we analyzed the requirements to the phase shifter for systems of active noise dampening. Then, we described the stages of circuit design of the phase shifter and examined the phase-frequency characteristic according to the output voltage formula obtained by the vector diagram method. Finally, we presented the results of SPICE simulation of the device: oscillograms and phase-frequency characteristics. The importance of the work is determined by the need to use active low-frequency noise dampening systems in industry

Keywords

Low-frequency acoustic noise, noise dampening, acoustic wave, anti-noise, phase shifter, antiphase, active noise control

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