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COMPLEX MODEL WITH FREQUENCY DEPENDENT PARAMETERS FOR ELECTRODYNAMIC SHAKER CHARACTERISTICS

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Abstract

The complex model with frequency-dependent parameters for calculation of electrodynamic shaker operating characteristics is offered. The parameters of an equivalent circuit of the device model are depended on frequency that provides increase of calculation accuracy. The influence of frequency on parameters of the electrodynamic shaker is researched with help of numerical field model. On the basis of the presented equivalent circuit, characteristics of the vibrator depending on frequency are calculated. The problem of calculation of operating characteristics

by means of the complex model based on the equations of an electromagnetic field, electric and electromechanical circuits is solved. References 11, figures 5, table 1.

Key words: equivalent circuit, electrodynamic shaker, operating characteristics.

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