عنوان مقاله:

Memory Response in Thermoelastic Plate with Three-Phase-Lag Model

نویسنده:

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خلاصه مقاله:

In this article, using memory-dependent derivative (MDD) on three-phase-lag model of thermoelasticity, a new generalized model of thermoelasticity theory with time delay and kernel function is constructed. The governing coupled equations of the new generalized thermoelasticity with time delay and kernel function are applied to two dimensional problem of an isotropic plate. The two dimensional equations of generalized thermoelasticity with MDD are solved using state space approach. Numerical inversion method is employed for the inversion of Laplace and Fourier transforms. The displacements, temperature and stress components for different thermoelastic models are presented graphically and the effect of different kernel and time delay on the considered parameters are observed.

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