

Abstract

Nasser M. El-Maghraby Hassan

Variational Theorem of Two-Temperature Generalized Thermoelasticity.

Recently, Youssef constructed a new theory of generalized thermoelasticity by taking into account the theory of heat conduction in deformable bodies, which depends upon two distinct temperatures, the conductive temperature and the thermo-dynamic temperature. In this paper, the variational theorem is obtained for the two-temperature generalized thermoelasticity model for a homogeneous and isotropic body.