

MAGNETIZATION REVERSAL OF A TYPE-II
SUPERCONDUCTOR THIN DISK UNDER
THE ACTION OF A CONSTANT
MAGNETIC FIELD

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S u m m a r y

The applicability of relations obtained by Clem and Sanchez for the *ac* magnetic susceptibility of type-II superconductor thin films to the case where an additional constant magnetic field is applied perpendicularly to the film has been analyzed in the framework of the critical state model. The issues concerning the sample “memory” and the influence of the magnetic field change prehistory on the current sample state have been discussed. It has been shown that the *ac* component of the magnetic moment and, hence, the amplitudes of *ac* magnetic susceptibility harmonics are established within one period of the *ac* magnetic field irrespective of the field prehistory.