



FIG. 7.23 (b) Calculated dependence of K (the induced current per unit film thickness) normalized by the drive-coil current I_{drive} , as a function of radial distance from the center of the coil. Curves are shown for several values of the spacing h between the coil and film. Note that the peak induced-current density occurs very near the mean radius of the drive coil. A cross-sectional view of the drive coil in relation to the superconducting film is illustrated at the bottom of the figure. The data are for a 300-turn coil (25 μm diameter wire) having an inside radius of 1.05 mm, an outside radius of 1.95 mm, and an axial length of 0.46 mm. (Adapted from Claassen et al. 1991.)