



FIG. 7.23 (b) Calculated dependence of  $K$  (the induced current per unit film thickness) normalized by the drive-coil current  $I_{\text{drive}}$ , 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  $\mu\text{m}$  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.)