



FIG. 2.8 Thermal conductance as a function of temperature for indium-solder joints. *The conductance is per square centimeter of contact area.* The Cu/In/Cu joint was made between 99.999 % pure copper and electrolytic-tough-pitch (ETP) copper; the Be/In/Cu joint was made between beryllium and ETP copper. Thermal conductance across the two types of joints was about the same, even though the base materials being joined had significantly different purity and thermal conductivity. The normal state was produced by applying a magnetic field. (From Radebaugh 1977 and Radebaugh et al. 1977).