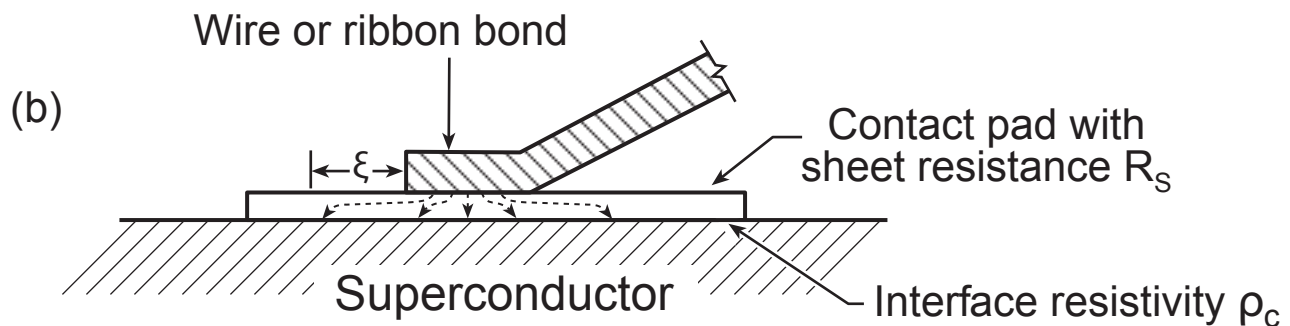
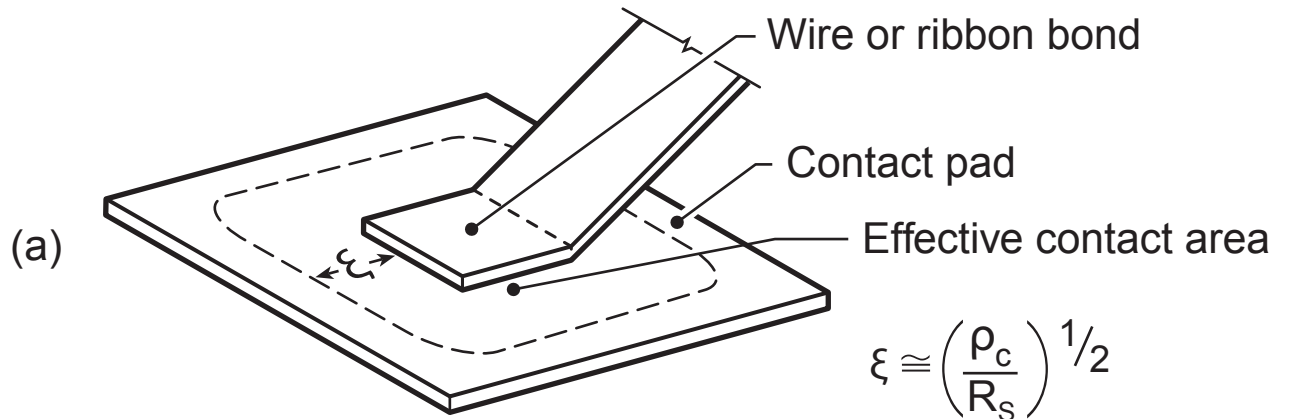


Localized current injection – spreading resistance effect:



Uniform current injection over entire contact pad:

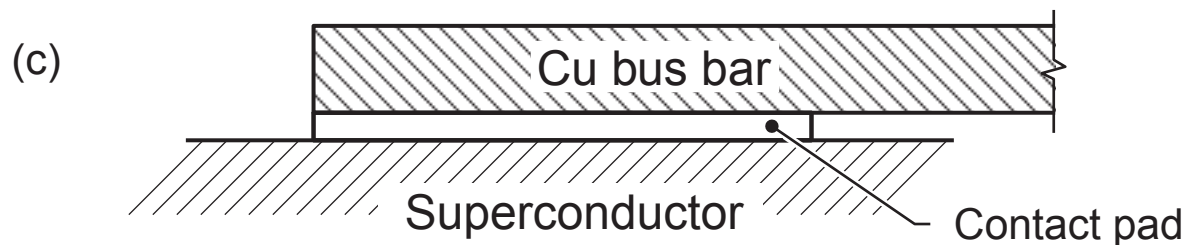


FIG. 8.17 Spreading resistance effect in thin contact pads. When current is injected into the middle of the contact pad (using a soldered wire, wire bond, or ribbon bond, for example) the sheet resistance of the pad limits the effective contact area to a distance ξ around the injection area, as shown in (a) and (b). Effects of spreading resistance are not a problem when current is injected uniformly over the entire contact-pad area by a thick copper bus bar, for example, as shown in (c)-just make sure the resistance along the copper bus bar is much smaller than the contact resistance.