ABSTRACT

LOW PROFILE SURFACE MOUNTABLE ELECTRICAL CONNECTOR ASSEMBLY

A low profile electrical connector assembly (10) includes plug and receptacle connectors (12,14) having mating dielectric housings (16,26) each mounting a plurality of terminals (40,42) which include contact portions (44,58) for interengagement with the contact portions of the terminals of the other connector. The terminals include mounting portions (46,50) for surface connection to circuit traces (48,52) on a pair of printed circuit boards (24,34). The terminals are generally U-shaped as defined by a first leg (54) that is joined to the respective mounting portion (50) of the terminal and free spring contact leg (56) that is engageable with the contact portion of one of the terminals (40) of the other connector and preloaded on a shoulder of the respective housing. The first leg (54) includes a proximal end (54a) fixed to the housing and a distal end (54b) removably held therein to permit a central portion of the first leg to be flexibly movable into a slot (62) in the housing (26). A retention member (66) is mounted at each end (18,28) of each connector housing (16,26) and is generally L-shaped with a first leg (70) attached to the respective end of one of the housings and second leg (68) adapted for surface securement to a surface of the printed circuit board. Holding members (82,88) are provided near the opposite ends (18,28) of the connector housings (16,26) for holding the connectors (12,14) in mated condition.

This Sheet Has Been Replaced