

MULTI-CHANNEL INDIVIDUALLY DEFINED CONTROLLED IMPEDANCE CONNECTOR

ABSTRACT

The multi-channel individually defined controlled impedance connector in the present invention comprises multiple transmission channels having pre-fabricated receptacles or pogo pins coated with dielectric sleeves for providing signal connectivity, shielding and impedance matching for individual channels. Thus, said transmission channels can individually be tuned to specific impedance values for achieving impedance matching and shielding against unwanted mutual coupling. Said channels are disposed in an electrically conductive slab and each of said channels comprises a receptacle or pogo pin coated or wrapped by at least one concentric layer of low-loss dielectric sleeve disposed along the longitudinal axes of a cylindrical cavity. The connector designs in the present invention have compatible dimensions with existing devices useful for direct replacement.

FIG. 2a accompanies the Abstract.