

Shielding Effectiveness

The interface configurations for all sizes of SSBP coaxes provide a high level of EMI isolation. The only openings in the outer conductor of a mated pair are extremely narrow longitudinal slots in the socket coax outer conductor interface. The slots are recessed within the outer sleeve and located behind the alignment entry of the socket coax assembly. When mated, a maximum of 0.001 in. annular space exists between the socket coax alignment sleeve entry ID and the OD of the mating SSBP pin coax outer conductor tube. The combination of contact features, (including the narrow slots at the plane of electrical contact between the pin and socket coax outer contacts, the labyrinth EMI path inside the socket coax interface, and the small annular opening at the socket coax entry) combine to provide exceptional EMI isolation for a blind-mate coax. This is confirmed by the data below for Size 20 SSBP coaxes tested in non-grounded MIL-DTL-38999 Series I connectors.

EMI Data

**Shielding Effectiveness of 5 channels of mated #20 SSBP coaxes on 047 SR with SMA, 08/09/2005.
Data is from 3 runs each channel, with all data per MIL-STD-1344 Method 3008.**

