

PRECISION 1.85mm (GPC1.85) COAXIAL CONNECTORS

Description

Precision 1.85mm (GPC1.85) connectors are miniature, instrument grade, air-interface connectors. Rated for operation up to 67 GHz, they are usable up to 70 GHz. They feature extremely low VSWR and insertion loss, and are designed to non-destructively mate with standard 1.85 and 2.4mm connectors. These connectors generally have a high performance support bead and comply with IEEE standard 287 general precision connectors, instrument grade GPC1.85.

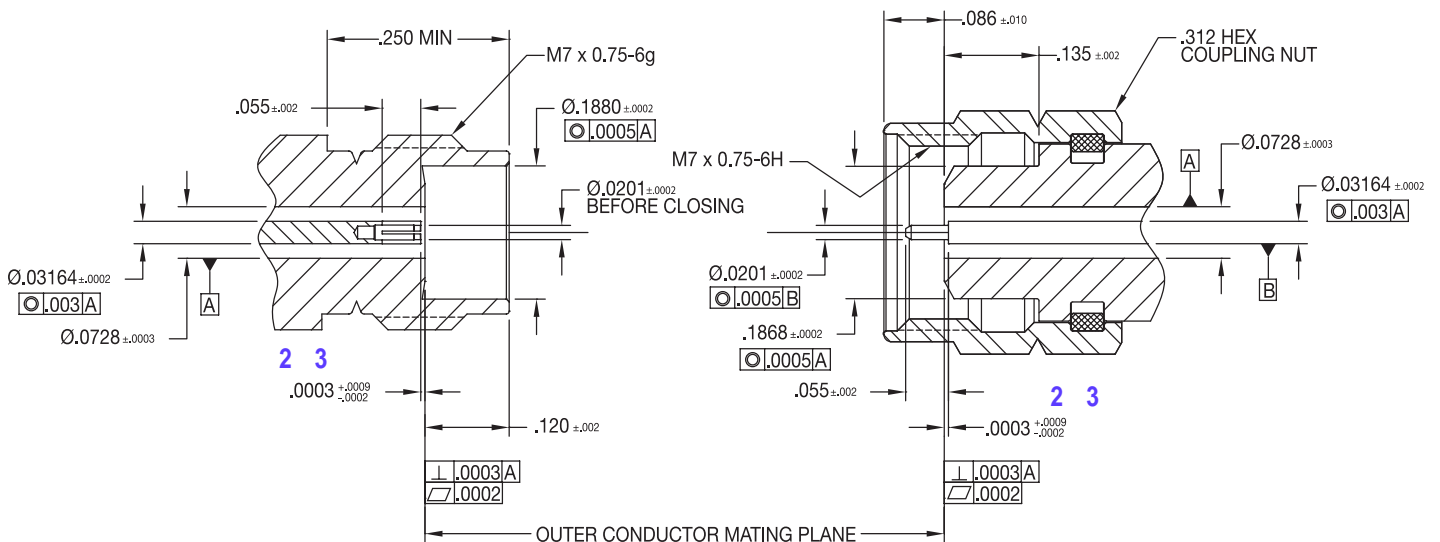


Figure 1. 1.85mm Connector Interface

- 1 The female center contact is designed to mate with a 0.0201 inch diameter, nominal, male contact pin. However, it is capable of making proper electrical contact with a 0.0199 minimum to 0.0203 maximum inch diameter male contact pin. Also, the diameter over the slots is larger to compensate for the slot reactance.
- 2 Maury's connector gage kit model A048A is designed to properly gage the contact pin locations of these connectors.
- 3 Tighter tolerances can be used at user's discretion. For high precision test port connectors, Maury recommends +0.0001 to +0.0005 for center contact pin shoulder recession behind the outer conductor mating plane.