

## W1-103F Connector

### Microstrip to W1 Female Flange Mount Connector

Figure 1. W1-103F Connector

#### 1. Materials

These materials may be needed to install the W1-103F Connector.

Name	Vendor and Model/Part No.
Solder, 80In/15Pb/5Ag	Indium Co., Indalloy#2
Cleaning Fluid	Isopropyl Alcohol
Electrically Conductive Epoxy	Bondline #2120

#### 2. Tools

This tool may be needed to install the W1-103F Connector. An equivalent tool may be used.

Name	Vendor and Part No.
W1-6 mm Torque Wrench	Anritsu 01-504

#### 3. Machining Dimensions

Machining details for creating the housing wall are shown in Figure 2. The centerline offset is calculated as follows:

Offset = substrate thickness + 0.0635 (radius of the pin) + 0.075 (clearance for solder flow)

#### CAUTION

The three holes shown in Figure 1, Detail A, must be concentric within 0.025 mm. If they are not, connector performance will be degraded.

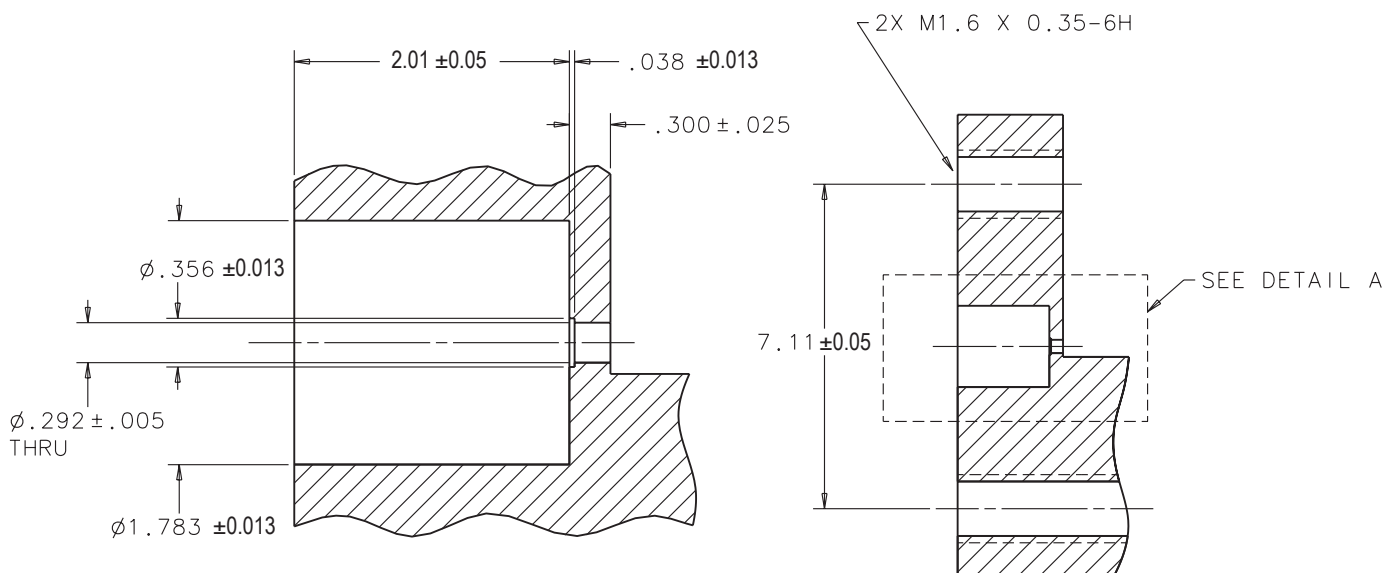


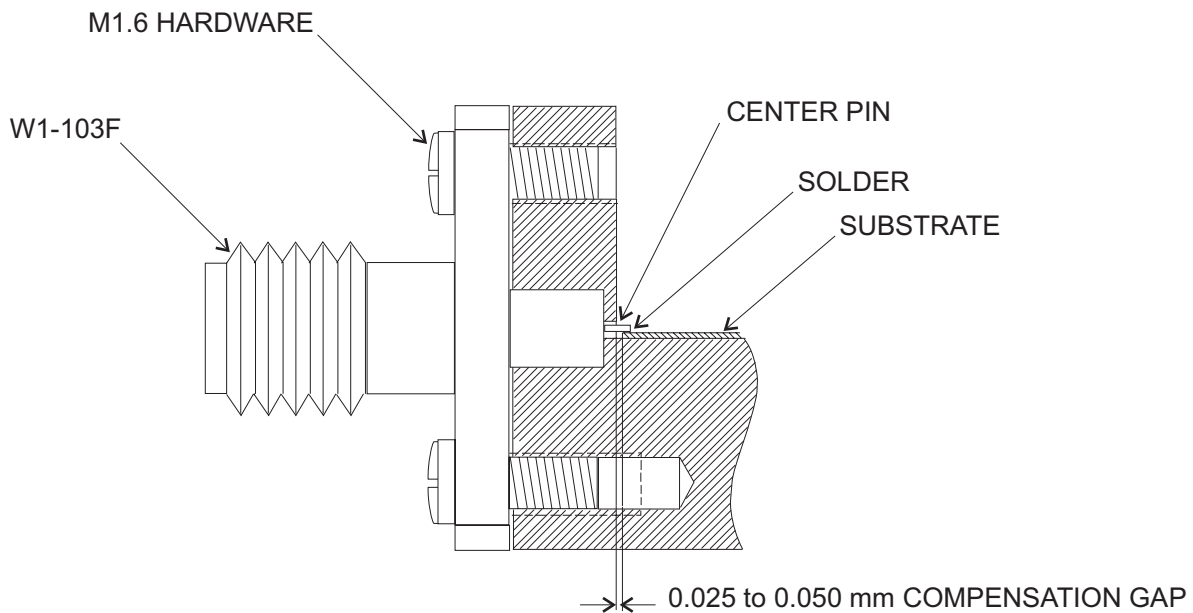
Figure 2. Machining Details

#### 4. Connecting the Housing to the Substrate

- a. Clean the housing with alcohol and blow it dry.
- b. Place the edge of the substrate 0.025 to 0.050 mm from the wall of the housing (see Figure 3).
- c. Place the substrate so that the center trace is aligned with the small through hole. The substrate can be attached to the housing with electrically conductive epoxy, or by using a low temperature indium solder.
- d. Install the W1-103F with two M1.6 screws. Keep the flange parallel to the housing when tightening the screws.
- e. Attach the center pin of the connector to the trace with electrically conductive epoxy, or by using a low temperature indium solder.

#### 5. One Millimeter Connection/Disconnection Procedure

- a. Use the 01-504, 6 mm torque wrench to apply the recommended torque to the 1 mm male coupling nut.



**Figure 3.** Connection to Substrate