



Microstrip to Female Sparkplug Connector Launcher

Figure 1. W1-105F Connector

1. Materials

These materials may be needed to install the connector.

Name	Vendor and Model/Part No.
Solder, 80In/15Pb/5Ag	Indium Co., Indalloy#2
Electrically Conductive Epoxy	Bondline #2120
Thread Retaining Compound	Loctite RC609
Cleaning Fluid	Isopropyl Alcohol

2. Tools

These tools may be needed to install the connector. Equivalent tools may be used.

Name	Vendor and Part No.
W1-6 mm Torque Wrench	Anritsu 01-504
W1-6X7 mm Open End Wrench	Anritsu 01-505
W1-7 mm Torque Wrench	Anritsu 01-506

3. Machining Dimensions

Machining details for creating the housing wall are shown in Figure 2.

The floor offset is calculated as follows:
Offset = substrate thickness + 0.0635 (radius of pin) + 0.075 (clearance for solder flow).

4. Connecting the Housing to the Substrate

- Clean the housing with alcohol and blow it dry.
- Place the edge of the substrate 0.025 mm from the end of the floor of the housing (see Figure 3).
- Place the substrate so that it is centered with respect to the housing hole.

5. Installing the Connector into the Housing

- Thread the connector into the housing wall by hand until lightly seated, then back the connector out approximately 1/8 turn, or 45 degrees. This will allow for final tightening with the torque wrench.
- Use the 7 mm torque wrench on the hex portion of the connector body to secure it to the housing wall. The proper amount of torque assures a good ground connection.

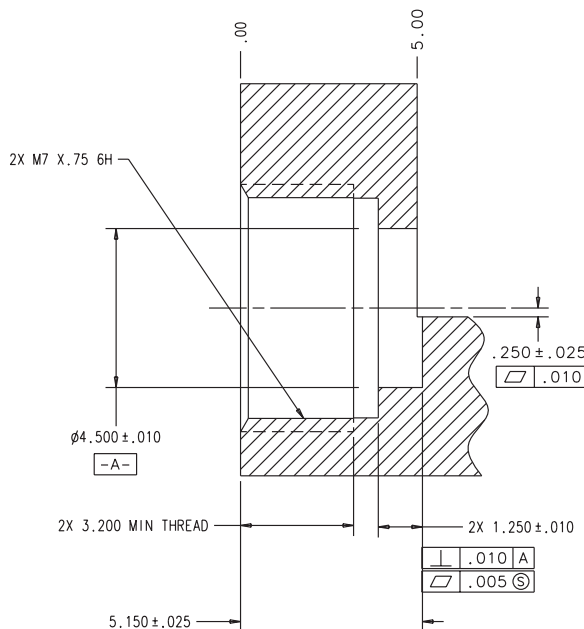


Figure 2. Machining Details

NOTE

To permanently install the launch assembly in the package or fixture, thread retaining compound may be applied to the connector threads prior to installation.

- c. Attach the center pin of the connector to the trace with electrically conductive epoxy, or by using a low temperature indium solder.

6. One Millimeter Connection Procedure

- a. Hold the hex portion of the connector with 7 mm side of the 01-505, open-end wrench.
- b. Use 01-504, 6 mm torque wrench to apply the recommended torque to the 1 mm male coupling nut.

7. One Millimeter Disconnection Procedure

- a. Hold the hex portion of the connector with 7 mm side of the 01-505, open end wrench.
- b. Use 01-504, 6 mm torque wrench to disconnect the 1 mm male coupling nut.

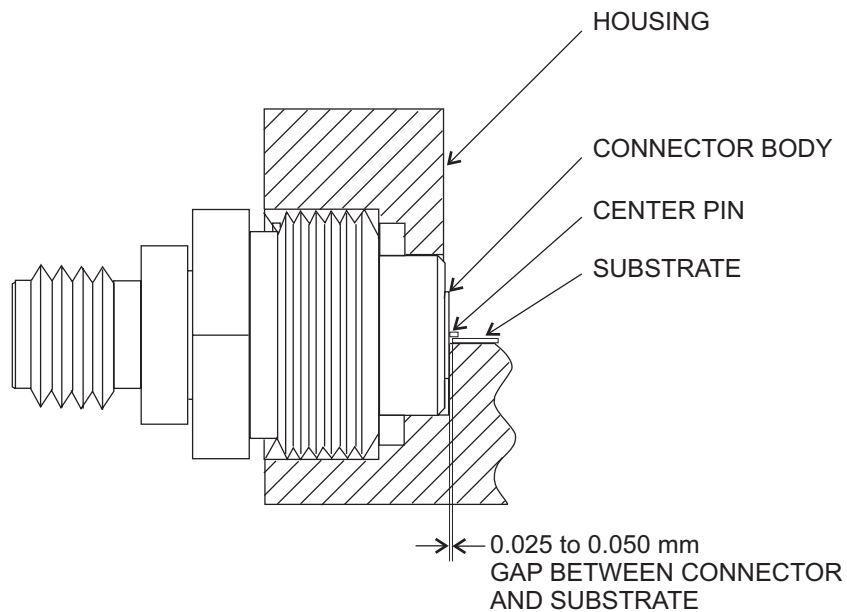


Figure 3. Connection to Substrate