

Specifications

Soldering temperature: 250°C max.
Soldering time: 5 minutes, max., cumulative.



Figure 1. V115FMS75 Connector Assembly

Anritsu

Integrated V Connector® Microstrip to V Female Part Number V115FMS75

1. Tools And Materials

The following tools and materials are needed to install V115FMS75 connector. Equivalent tools may be used if recommended tools are not available.

| Name | Vendor and Model/Part Number |
|--|---|
| Solder, 62% Sn, 36% Pb, 2% Ag, or 60% Pb, 40% In, 24 gauge, 0.75 mm (0.030 inch) diameter rosin core | SN62 Kester Co. or Indalloy #206, Indium Corporation |
| Cleaning Fluid | Isopropyl Alcohol |
| Stereo Microscope .07-30X | Bausch & Lomb, Model Stereo Zoom 4 |
| Silver Epoxy | |
| Rosin Flux 1544 | Kester Co. |

2. Machining Dimensions

Machining dimensions for required mounting hole is provided in Figure 2.

* Caution:

These connectors are not suitable for use with high-temperature solder such as gold-tin.

NOTE

Depending upon the application, substrate can be soldered to the housing using

- medium or low temperature solder. The substrate can also be attached to the housing using epoxy.
- 3. Installation of Connector Into Housing**
 - a. Pre-flux connector and the inner walls of the mounting hole.
 - b. Pre-make the solder rings. (Wrap the solder wire around the connector and make one turn to form a solder ring around the connector. Cut the solder wire).
 - c. Place and push the connector into the housing.
 - d. Place housing on a hot plate to flow the solder. For Sn62, set the hot

plate to 200°C. For Indalloy #206, set the hot plate to 250°C.

- e. When solder starts to melt, push the connector into the housing so that the connector flats are aligned with the housing bore.
- f. Remove the housing from the hot plate, keeping the connector firmly pressed to the housing. Allow assembly to cool at room temperature.
- g. Clean with alcohol or equivalent solvent for removing flux.

NOTE

Visually verify that there is a good solder flow (without any pin-holes) between the outer conductor and the wall of the

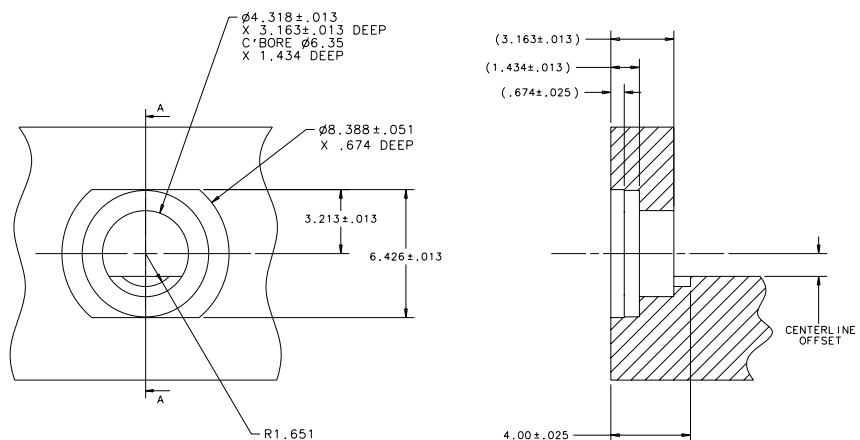


Figure 2. Machining Dimensions for V115FMS75 Mounting Hole

housing. This will ensure that a hermetic seal is created for the connector assembly.

4. Installation of Substrate (Figures 3 and 4)

- a. Place a small bead of silver epoxy along the length of the connector ground lip. Be careful to not use excessive epoxy so it doesn't wick up the edge of the substrate.
- b. Install the substrate into the housing and make sure the trace is aligned with the connector center pin.
- c. Following the instructions in the V110-1 Installation Note, slide a Stress Relief Contact, V110-1, onto the center conductor aligned so the lip of contact is close to, or touching, the trace to which it is to be connected.
- d. Gap-weld the contact to the trace. If you want to use silver epoxy, place a dot of epoxy on the trace and slide the Stress Relief Contact in place over the dot. Press the tab of the contact into the epoxy to be sure there a good electrical connection.
- e. Follow your epoxy manufacturer's recommendations to cure the epoxy.

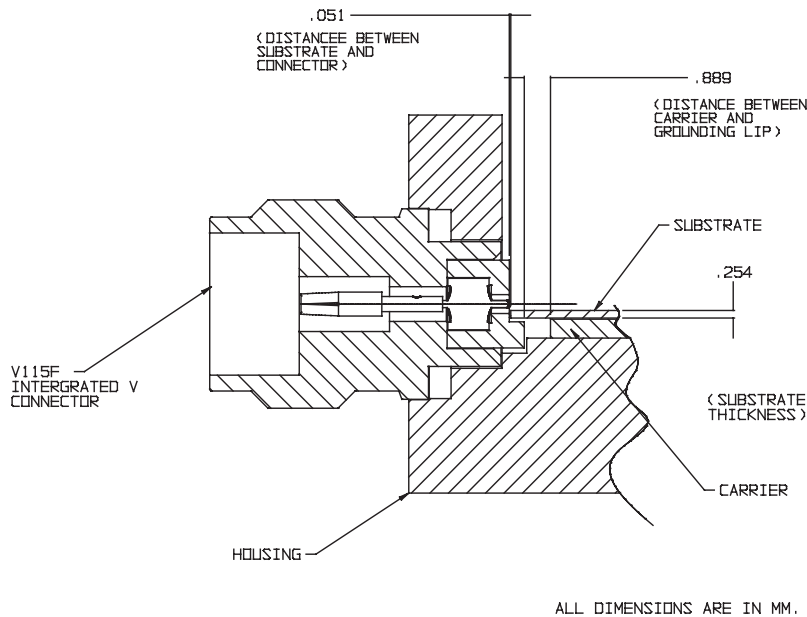


Figure 3. V115FMS75 Assembly