

Specifications

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



Anritsu

Integrated V Connector® Substrate to V Female Part Number V116F

Figure 1. V116F Connector Assembly

1. Tools And Materials

The following tools and materials are needed to install V116F connector. Equivalent tools may be used if recommended tools are not available.

Name	Vendor and Model/Part Number
Torquing Tool Kit	Anritsu 01-105A
Torque Screwdriver, 8 in-lb	Mountz, San Jose, CA* PN: 020075, specify torque
Loctite RC/609	Loctite
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
Rosin Flux	1544 Kester Co.
Indium solder wire, 80 In/15Pb/5Ag (.5 mm diameter).	Indium Corp. of America

* Caution:

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

2. Machining Dimensions

V Connector is a trademark of ANRITSU Company.
LOCTITE is a trademark of Loctite Corporation.
*Mountz, 1-800-456-1828

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

3. Installation of Connector Into Housing

- The recommended mounting hole information is given in Figure 2.
- If the connector installation is needed to be hermetic, wrap solder around the connector at the top of the smaller threads and lightly flux the mounting hole and connector.
- Screw the VF installation Fixture on to the outer conductor until finger tight. If you used solder in step b, do not use Loctite. Otherwise, apply Loctite to the threads of the connector.
- Install the 5/16-inch socket on to the 8-in-lb screwdriver handle. Torque the outer conductor to 8 inch-pounds using the screwdriver handle and socket.
- Remove the installation fixture from the outer conductor by holding the barrel nut with one of the 5/16-inch wrenches while loosening the adapter with the screwdriver handle and socket.
- If solder was used in step c, heat the assembly on a hot plate. For Sn62, set the hot plate to 200°C and for Indalloy #206, set the hot plate to 250°C. to flow the solder.
- As soon as the solder has flowed completely, remove the assembly from the hot plate and allow it to cool at room temperature. For Sn62, set the hot plate to 200°C and for Indalloy #206, set the hot plate to 250°C.
- Visually inspect the solder joint to be sure there are no voids or pinholes in the solder that could lead to hermeticity failures. If there are de-

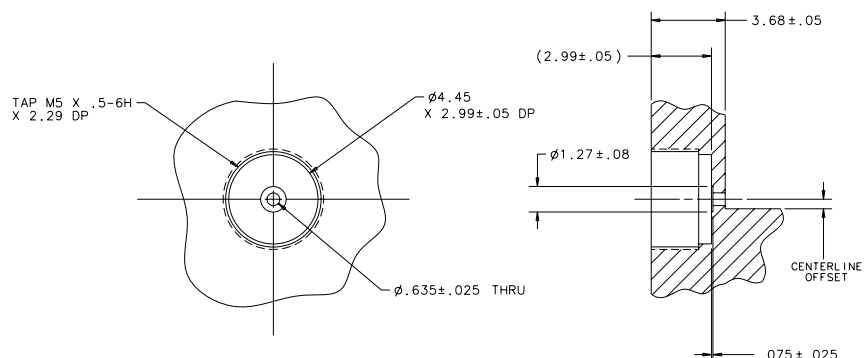


Figure 2. Machining Dimensions for V116F Mounting Hole

fects in the solder, reheat the assembly to reflow the solder.

4. Connecting to the Substrate (Figures 3 and 4)

NOTE

Depending upon the application, substrate can be soldered to the housing using medium or low temperature solder. The substrate can be attached to the housing using epoxy also.

- a. Install the substrate as shown in Figure 3.
- b. Place substrate in housing and ensure that the the trace is aligned with the connector pin. The recommended gap between the substrate and the connector is 0.05" mm
- c. Place housing on 165° C hot plate to flow the solder.
- d. Remove housing from the hot plate and allow assembly to cool at room temperature.
- e. Clean with alcohol or equivalent solvent for removing flux and visually inspect all solder joints.
- f. Insert sliding contact on to the connector pin and make a gap weld joint, or solder to the circuit. Use the minimum amount of solder to make the connection. Figure 4 shows an outline drawing of the V116F.

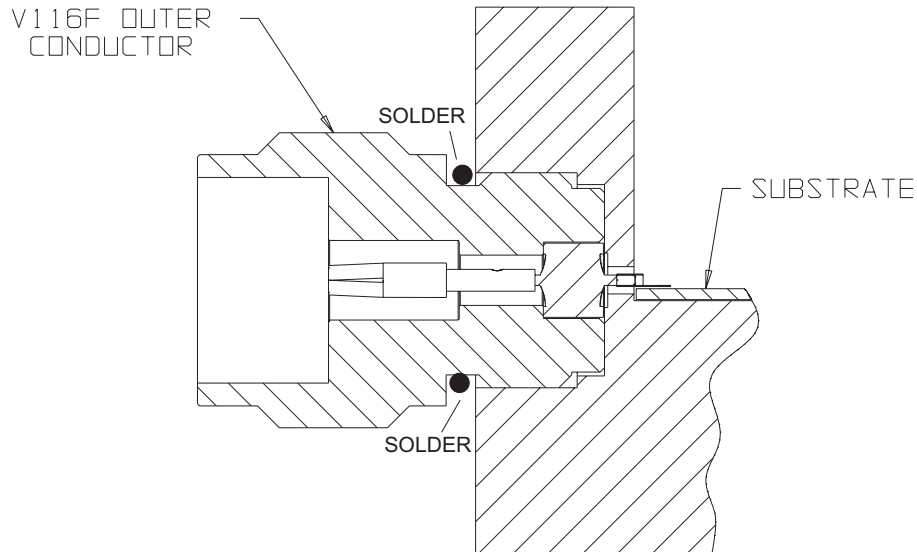


Figure 3. V116F Assembly