Specification

Soldering Temperature: 250° C, maximum



VP Shroud to Microstrip Interface

VP100BMS75

/Inritsu

Figure 1. VP100BMS75 Shroud

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1. Tools and Materials

These tools and materials are needed to install the VP100BMS75 Shroud.

Name	Vendor and Model/Part Number
Solder, 80 Au/20 Sn, washer (perform) 3.76 OD, 3.2 ID, 0.13 thick	Indium Corp. Indalloy #182 Anritsu Co. 01-503
Cleaning Fluid	Isopropyl Alcohol
Rosin Flux	#1544- HT, Kester Co.
Stereo Microscope .07- 30X	Bausch & Lomb Stereo Zoom 4
Silver Epoxy	Ablebond 88-1

2. Machining Dimensions

Machining dimensions for the shroud mounting hole are shown in Figures 2 and 3.

3. Installing the Shroud into the Housing

 Pre-flux the shroud and the inner walls of the mounting hole.

NOTE

Flux may not be needed if soldering is done in a reducing atmosphere.

- For a thick-wall housing, place three to four solder washers on the counter-bore and place the shroud into the housing as shown in Figure 2.
- For a thin-wall housing, place one or two solder washers over the shroud inside the housing as shown in Figure 3.
- d. Place the housing on 250° C hot plate to flow the solder.
- e. When the solder starts to melt, push the shroud into the housing so that the shroud flats are aligned with the housing slot.
- f. Remove the housing from the hot plate keeping the shroud firmly pressed to the housing. Allow the assembly to cool at room temperature.
- g. Clean the assembly with alcohol or an equivalent solvent for removing flux.

NOTE

Visually verify that there is good solder flow (without any pinholes or gaps) between the outer conductor and the wall of the housing. This will ensure that a hermetic seal is created for the shroud assembly.

4. Installing a Substrate on a Carrier into the Housing

- Spread a thin layer of silver epoxy on the ground lip.
- b. Place the substrate (0.19 mm –
 7.5 mil thick) on top of the ground lip.
- c. Install the mounting screws into the substrate and tighten them to the recommended torque for the screw size used, making sure the center pin is properly aligned with the circuit trace. The recommended gap between the substrate and the shroud is 0.05 mm and the gap between the ground lip and the carrier should be a minimum of 0.89 mm.
- d. Cure the silver epoxy per the manufacturers instructions.
- e. Following the instructions included with the V110-1 Stress Relief Contact, install a contact onto the shroud center pin.
- Attach the connecting tab to the circuit trace by soldering, parallel gap welding or with silver epoxy.

NOTE

The substrate can also be soldered to the connector using a preformed solder sheet.

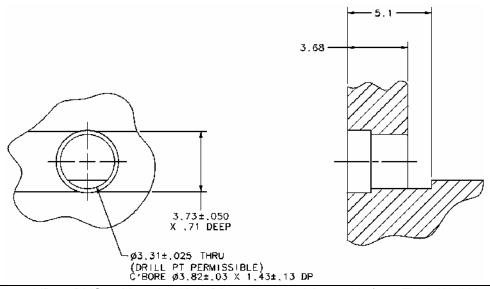


Figure 2. VP100BMS75 Mounting Hole Dimensions and Assembly for a Thick-Wall Housing

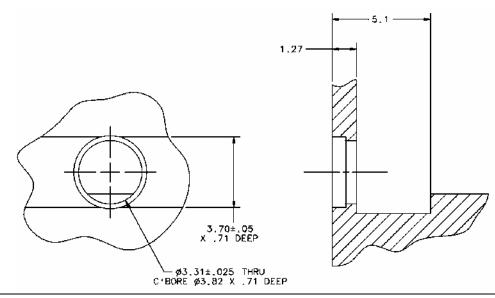


Figure 3. VP100BMS75 Mounting Hole Dimensions and Assembly for a Thin-Wall Housing