

## Specifications

Temperature Range: -54°C to +125°C  
Soldering Temperature: 250° C, maximum  
Soldering Time: Any heating operation to 250° C not to exceed 10 seconds with a maximum of three heating operations to 250° C

### Material:

Brass, gold plated  
Center Conductor: Kovar, gold plated  
Dielectric: Corning 7070 glass



# Anritsu

## VP Shroud Interface VP100BNL

Figure 1. VP100BNL Shroud

### 1. Tools and Materials

These tools and materials are needed to install the VP100BNL Shroud.

| Name                       | Vendor and Model/Part Number       |
|----------------------------|------------------------------------|
| Cleaning Fluid             | Isopropyl Alcohol                  |
| Rosin Flux                 | #1544- HT, Kester Co.              |
| Stereo Microscope, .07-30X | Model Stereo Zoom 4, Bausch & Lomb |

### 2. Machining Dimensions

Machining dimensions for the shroud mounting hole are shown in Figure 2.

### 3. Installing the Shroud into the Housing

- Pre-flux the shroud and the inner walls of the mounting hole. Flux may not be needed if soldering is done in a reducing atmosphere.
- For a thick-wall housing place three to four solder preform washers on the shroud and place the shroud into the housing as shown in Figure 2.
- For a thin-wall housing, place one or two solder preform washers over the shroud inside the housing as shown in Figure 3.
- Place the housing on 250° C hot plate or furnace to flow the solder.
- When the solder starts to melt, push the shroud into the housing.
- Remove the housing from the hot plate keeping the shroud firmly pressed to the housing. Allow the assembly to cool at room temperature.
- Clean 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

- Place the substrate into the housing.
- Install 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.
- 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.

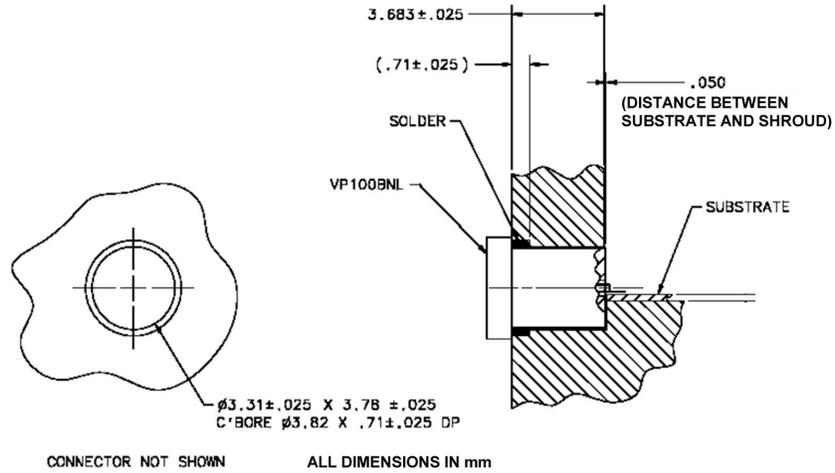


Figure 2. VP100BNL Mounting Hole Dimensions and Assembly Drawing for Thick-wall housing

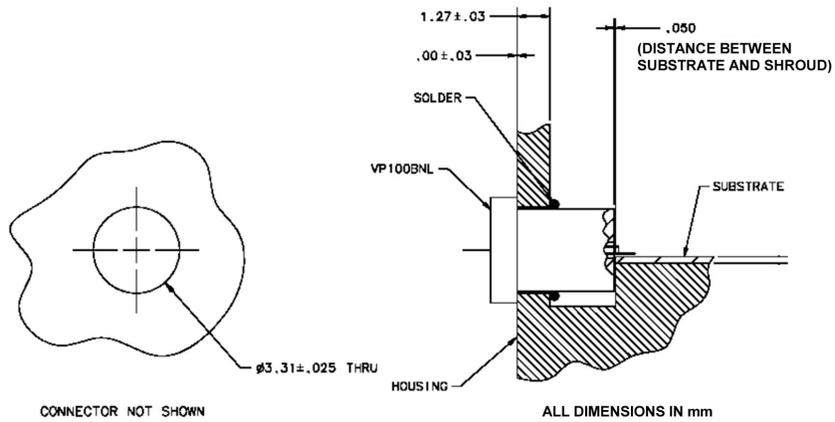


Figure 3. VP100BNL Mounting Hole Dimensions and Assembly Drawing for Thin-wall housing

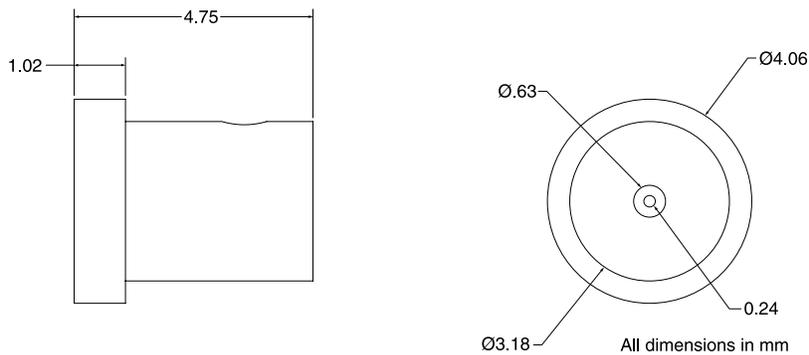


Figure 4. VP100BNL Outline Drawing