



V Connector[®]
Glass Support Bead
Part Number V100
5 Each

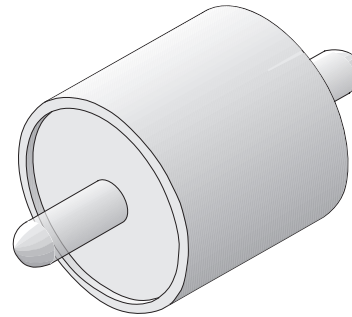


Figure 1. V100 Glass Support Bead

1. Tools And Materials

The following tools and materials are needed to install a V100 Glass Support Bead in a mounting hole on a housing. Equivalent tools may be used if the recommended tools are not available.

Name	Vendor and Model/Part Number
Hot Plate	H2215, American Scientific Products
Glass Support Bead Holding Fixture	01-303 Anritsu Co.
Step Drill and Tap Kit	01-304 or 01-308 Anritsu Co.
Solder, 62% tin, 24 gauge, 0.40 mm diameter rosin core	SN62 Kester Co. or AuSn
Rosin Flux	135, Kester Co.
Cleaning Fluid	isopropyl alcohol

2. Machining Dimensions

Machining dimensions for the mounting hole required to install a glass support bead in the V102 F/M Sparkplug and V103 F/M Flange Mount installations are provided on the instruction sheets for those components, as referenced in Table 1 on the reverse side of this page.

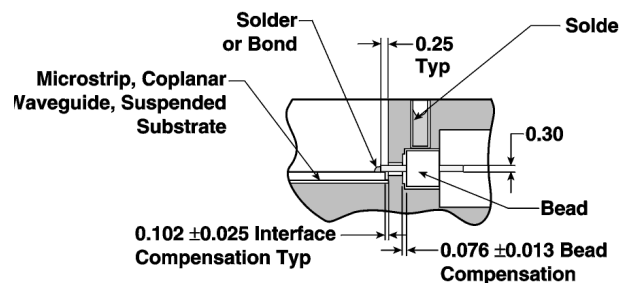


Figure 2. Glass Support Bead Installation

3. Fabrication Instructions

Fabrication instructions for installing the V100 Glass Support Bead in a microwave-device housing are given below. These instructions are for both the V102 F/M Sparkplug and V103 F/M Flange Mount Connectors.

- a. Install the microstrip into the housing. Refer to Figure 2 for the dimensional tolerances around the glass support bead.
- b. Set the hot plate to 200°C ±10°C for the SN62 solder, or 310°C ±0°C for AuSn solder.
- c. For V102 F/M Sparkplug installation:
 - (1) Flux the glass support bead and insert it, long-end first, into the 01-303 Glass Support Bead Holding Fixture (Figure 3).

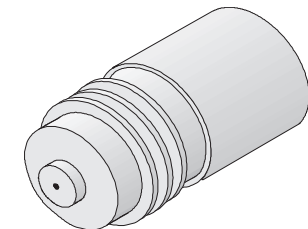


Figure 3. Glass Support Bead Holding Fixture

- (2) Using the holding fixture to handle the bead, screw the bead into the mounting-hole opening until the center conductor protrudes through the backside interface and contacts the microstrip.
- (3) Go to step e.
- d. For V103 F/M Flange Mount Installation:
- Lightly flux the glass support bead and insert it short-end first into the mounting hole opening. Push the bead in until the center conductor protrudes through the backside interface and contacts the microstrip.
- e. Ensure that the glass support bead is centered, and that it is making good contact with the microstrip.
- f. Insert a length of solder into the soldering access hole, and cut it flush with the top of the hole.
- g. Place the device on the hot plate and leave it there for approximately 15 seconds after the solder melts.
- h. Remove the device from hot plate and allow it to cool.
- i. Bond or solder the center conductor to the microstrip. Use a minimum amount of solder.
- j. Remove the glass support bead holding fixture, and clean the device to remove flux residue.

Table 1 . Component Instruction Sheets

Component Model Number	Instruction Sheet Number
V102F	10300-00007
V102M	10300-00009
V103F	10300-00011
V103M	10300-00013