

Termination Instructions for PIC P/N 110207 - SMA 90° Plug

(for S44191, S44193, S46191 Coax Cable)

Recommended Hand Tools :	X-acto Knife, Sharp Razor, Wire Cutters
Required Cable Tools :	M22520 / 5- 01 Hex Crimp Tool
	M22520 / 5-11 Hex Crimp Die Set, Cavity A (.213" hex) Soldering equipment

Dimensions in Inches - NOT to Scale

- 1) Cut cable end squarely, and re-shape the cut end to concentric. Install the heat shrink and the ferrule onto the cable (Fig. 1). Make "Cut A" @ 0.20" from cable end, through the jacket and braids to dielectric (Fig 1). Do not nick or cut into dielectric. Remove jacket and foil/braids.
- 2) Make "Cut B" @ 0.10" from cable end, through the dielectric, down to the center conductor. Do not nick or cut into the center conductor. Remove the dielectric (Fig. 1).
- 3) Make "Cut C" @ 0.53" from cable end, through the jacket. Do not nick or cut into the outer braids. Remove cable jacket (Fig. 1).
- 4) Flare out the outer braid to expose the (gold) foil shield. Slit the foil lengthwise in 3 or 4 places and flare back the same as the outer braid. Carefully flare out the inner Strip Braid away from the dielectric using tweezers or an *X-acto knife* (Fig. 2).
- 5) Install the connector body over the dielectric and under the flared shields until the cable center conductor fits into the slot of the internal connector center contact. The cable center conductor must not extend past the diameter of the internal center contact (Fig 3).
- 6) Solder center conductor to the center contact, ensuring reliable solder bond. Avoid applying excess solder, which will run down the side of the contact. Smooth all braids down over the rear of the connector body, covering the knurl. Trim off any excess braids past the knurled rear body, before the shoulder (Fig 3).
- 7) Pull the crimp ferrule up over the braids. Secure the body while positioning the ferrule to avoid stress on the center conductor and contact. Trim any stray braids at the shoulder prior to seating the ferrule against the connector body (Fig 3).
- 8) With the ferrule seated against the connector body, crimp the ferrule with the M22520 / 5-01 hex crimp tool with the M22520 / 5 - 11 hex crimp die set, Cavity A (.213" hex) (Fig 4).
- 9) Apply a minimal amount of Loctite 271 in the corner of the step on the back side of the cube body, where the end cap fits (Fig. 4). Any excess Loctite on the inside wall of the connector body (below the step) must be cleaned off. Install the end cap into the step in the connector body, convex side up, and punch down using an Arbor press w/0.18" diameter flat punch (fixture F-30), just until "dimpled" as shown (Fig. 5). A pliers or similar compressible hand tool can be used to compress the end cap into the step.
- 10) Shrink the ATUM Dual Wall Shrink tube, starting at the cube section of the connector body, covering the rear of the connector body, and onto the cable.

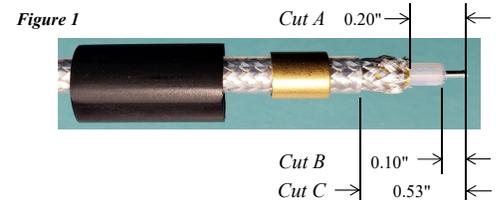


Figure 2



Figure 3

Solder conductor to center contact



Figure 4

Loctite 271

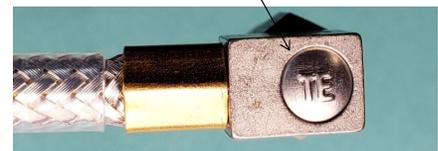


Figure 5

Punch down the end cap



Note : Connector Length added to cable assy = + .090" nominal to end of cube body, or + .010" nominal to centerline of connector interface