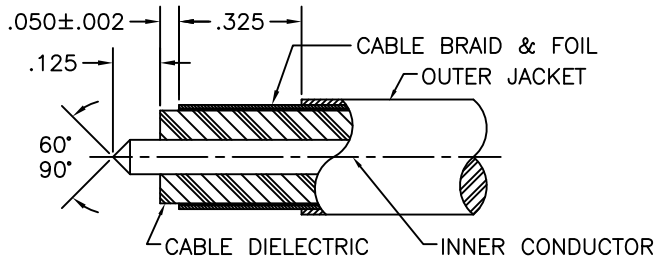
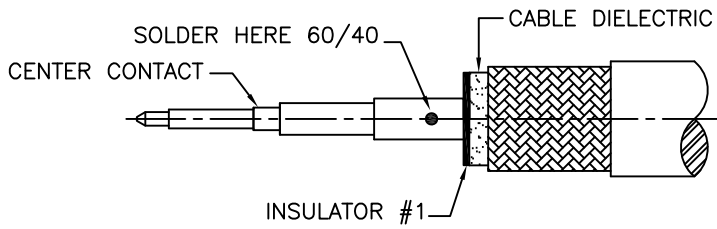


# SGMC MICROWAVE CABLE ASSEMBLY INSTRUCTIONS



## 1.0 PREPARATION OF CABLE:

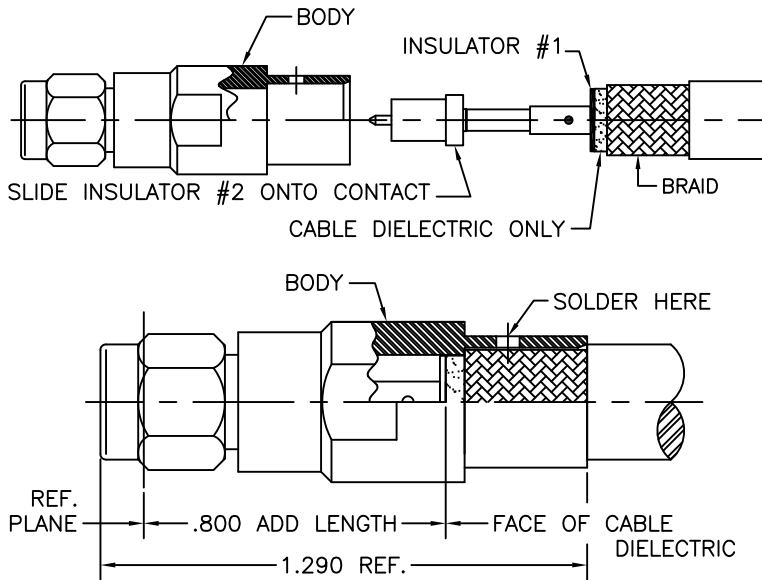
- 1.1 TRIM CABLE TO DIMENSIONS SHOWN. ALL CUTS MADE TO CABLE LAYERS SHOULD BE 90° FROM CENTERLINE. CARE SHOULD BE TAKEN NOT TO NICK CABLE DIELECTRIC, INNER CONDUCTOR, SILVER FOIL, AND OUTER BRAID DURING THIS OPERATION.
- 1.2 INSPECT CABLE PREPARATION TO DIMENSIONS SHOWN.
- 1.3 FILE BLUNT END OF CABLE INNER CONDUCTOR TO A 60°/90° CONE. INSPECT PREPARATION OF CABLE.



## 2.0 SOLDERING OF CONTACT TO INNER CABLE CONDUCTOR:

- 2.1 PLACE INSULATOR #1 ON CENTER CONDUCTOR RESTING FIRMLY AGAINST THE CABLE DIELECTRIC AS SHOWN.
- 2.2 TIN INNER CONDUCTOR OF CABLE. HEAT CONTACT AND SLIDE IT OVER INNER CONDUCTOR TO REST FIRMLY AGAINST INSULATOR.
- 2.3 USING 60/40 SOLDER, SOLDER CONTACT AS SHOWN.
- 2.4 INSPECT & REMOVE EXCESS SOLDER. CLEAN WITH SOLVENT.

**NOTE:** EXCESSIVE HEAT CAUSES DIELECTRIC (TEFLON) TO SHRINK BELOW ACCEPTABLE LEVELS. HEAT SOLDER ONLY UNTIL IT STARTS TO FLOW.



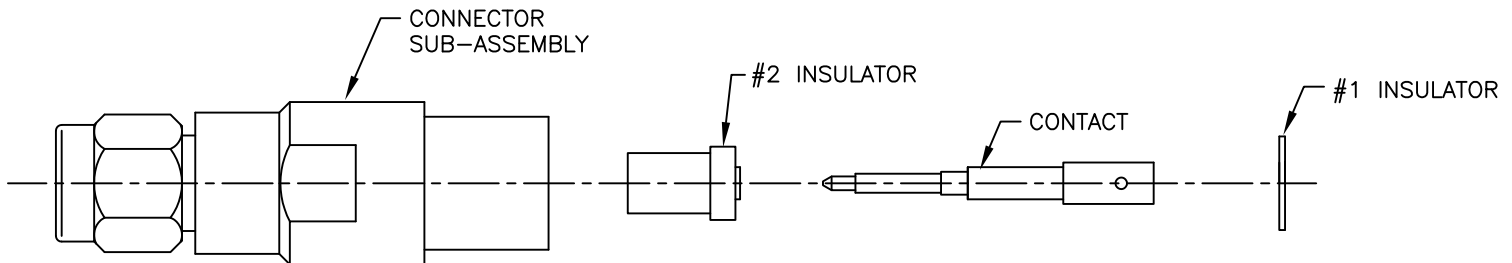
## 3.0 SOLDERING OF CABLE SUB-ASSY TO CONNECTOR SUB-ASSY:

- 3.1 SLIDE INSULATOR #2 ONTO CONTACT AS SHOWN.
- 3.2 TIN INNER BRAID OF CABLE. HEAT BACK OF BODY AND SLIDE IT OVER THE CABLE UNTIL IT BOTTOMS COMPLETELY ON CABLE SHOULDER (CABLE JACKET). DURING THIS STEP THE CONTACT & INSULATOR #2 ARE ALSO INSERTED INTO THE BODY UNTIL THEY COMPLETELY BOTTOM INSIDE THE CONNECTOR BODY.
- 3.3 PLACE CABLE INTO FIXTURE BASE AND SECURE TO PREVENT MOVEMENT WHILE SOLDERING.
- 3.4 USING A RESISTIVE SOLDERING IRON, HEAT BODY (HOLDING DOWNWARD) UNTIL SOLDER FLOWS EVENLY AROUND CABLE AND CONNECTOR BODY.
- 3.5 REMOVE CABLE ASSEMBLY AND CLEAN SOLDER JOINT WITH SOLVENT (ALCOHOL) AND VERIFY THAT SOLDER IS FREE OF VOIDS.

INSPECT INTERFACE DIMENSION:

PIN = .000/-.010 (FLUSH TO BELOW REF. PLANE)  
DIELECTRIC = .000/-.010 (FLUSH TO BELOW REF. PLANE)

## 4.0 CONNECTOR LAYOUT:



DWG NO. **200-50-10-800**

TITLE:  
**SMA MALE TO  
IW 2801 CABLE  
(Direct Solder)**

**SGMC MICROWAVE**  
[www.sgmcmicrowave.com](http://www.sgmcmicrowave.com)

SCALE: NTS CAGE CODE: 1UYM4 SIZE: A

SHEET: 1 OF 1 DRAWN: LRH II APPR:

### REVISIONS

LTR:	DESCRIPTION: (ECN#)	DATE:
--	DWG. RELEASED	01/18/13

### TOOLS REQUIRED:

1. RESISTANCE SOLDERING MACHINE.
2. FLUX, SOLDER POT, 60/40 SOLDER.
3. .010 SOLDER SHIM, RAZOR BLADES.
4. SCOTCH BRITE.
5. CABLE CONNECTOR ASSEMBLY FIXTURE.
6. SOLVENT (ISOPROPYL ALCOHOL).

**"PROPRIETARY INFORMATION"**