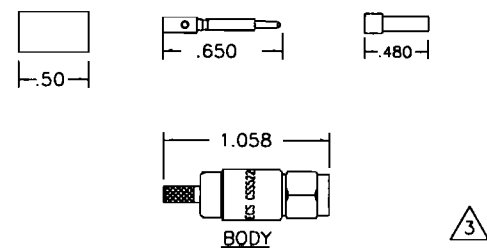


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**INSTALLATION INSTRUCTIONS**

REVISIONS					
ECN	ZONE	REV.	DESCRIPTION	DATE	APPROVED
13939	-	N/C	NEW RELEASE	6/28/01	D KNOLL
17356	-	A	CHANGED STIFFENER AND STRIPPING DIM'S	4/16/03	D KNOLL
41321	-	B	REVISE PICTORIAL OF CONN, DIM WAS 1.067	9/28/10	DJ/K

**FERRULE CONTACT DIELECTRIC STIFFENER**



**SPECIFICATIONS**

**ELECTRICAL**

IMPEDANCE: 50 OHMS NOMINAL  
 FREQUENCY RANGE: 0-18 GHz  
 VSWR: 1.05 + .05 FGHz. MAXIMUM

INSERTION LOSS: .03√FGHz dB MAX  
 WORKING VOLTAGE: 500 VRMS @ SEA LEVEL  
 DIELECTRIC WITHSTANDING: 1500 VRMS @ SEA LEVEL  
 INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM @ 500 VOLTS DC

**MECHANICAL**

CONNECTOR INTERFACE: DIMENSIONS PER MIL-STD-348A FIGURE 310-1  
 TERMINATION STYLE: CABLE CONTACT-SOLDER OR CRIMP FERRULE CRIMP  
 CABLE RETENTION: 20 LBS

**ENVIRONMENTAL**

TEMPERATURE RATING: -65° TO +165° C  
 VIBRATION: MIL-STD-202, METHOD 204, COND. D  
 SHOCK: MIL-STD-202, METHOD 213, COND. I  
 THERMAL SHOCK: MIL-STD-202, METHOD 107, COND. B  
 CORROSION: MIL-STD-202, METHOD 101, COND. B  
 MOISTURE RESISTANCE: MIL-STD-202, METHOD 106

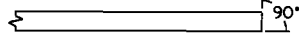
**MATERIALS**

BODY: STAINLESS STEEL PER QQ-S-763  
 FERRULE: ANNEALED BRASS PER ASTM B16  
 CENTER CONTACT: BRASS PER ASTM B16  
 DIELECTRIC: TEFLON PER ASTM D1710  
 GASKET: SILICON RUBBER PER ZZ-R-765

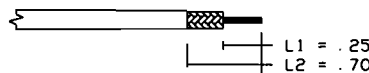
**FINISHES**

FERRULE: BRIGHT NICKEL PER QQ-N-290  
 CENTER CONTACT: GOLD PER MIL-G-45204

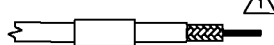
1. BEGIN BY CUTTING THE CABLE OFF SQUARE.



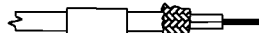
2. STRIP THE CABLE AS SHOWN, BEGINNING WITH L1 AND ENDING WITH L2. TAKE CARE NOT TO NICK THE CONDUCTORS WHILE STRIPPING THE DIELECTRIC AND JACKET. THE USE OF A STRIPPER DESIGNED FOR COAXIAL CABLE IS RECOMMENDED.



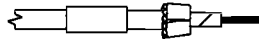
3. SLIDE THE FERRULE AND ADHESIVE SHRINK TUBING OVER THE END OF THE CABLE.



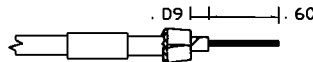
4. USING TWEEZERS, FOLD THE OUTER BRAID BACK OVER THE CABLE JACKET, LEAVING AS MUCH WEAVE AS POSSIBLE.



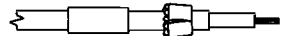
5. SLIT FOIL LONGITUDINALLY AND FOLD BACK OVER THE OTHER SHIELD.



6. REMOVE THE DIELECTRIC FROM THE CENTER CONDUCTOR BACK APPROXIMATELY .60 INCHES FROM THE END OF THE CONDUCTOR. BE CAREFUL NOT TO NICK THE CENTER CONDUCTOR. THERMAL STRIPPERS ARE RECOMMENDED. LEAVE APPROXIMATELY .09 INCHES OF DIELECTRIC ON THE CABLE FOR THE CUP IN THE STIFFENER.



7. INSTALL DIELECTRIC STIFFENER OVER CENTER CONDUCTOR AND THE CABLE DIELECTRIC MAKING SURE THAT CABLE DIELECTRIC IS FULLY SEATED INSIDE CUPPED END OF DIELECTRIC STIFFENER.

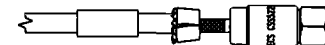


8. ENSURE THAT THE CONTACT IS BUTTED AGAINST THE DIELECTRIC STIFFENER. TERMINATE CONTACT USING METHOD A OR B.

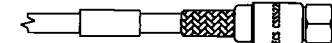
- a) SOLDER CONTACT ONTO CENTER CONDUCTOR, PER MIL-STD-2000, USING 63Sn/37Pb SOLDER. CLEAN FLUX RESIDUE USING APPROPRIATE CLEANER.
- b) CRIMP CONTACT ONTO CENTER CONDUCTOR USING A M22520/5-09 DIE (B HEX). IN A M22520/5-01 TOOL FRAME.



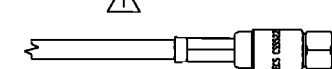
9. SLIDE THE BODY OF THE CONNECTOR OVER THE END OF THE CABLE UNTIL THE NOTCH IN THE CONTACT SEATS INTO THE RIDGE INSIDE THE CONNECTOR DIELECTRIC. CAUTION: PUSH CABLE INTO THE CONNECTOR STRAIGHT TO AVOID KINKING THE CABLE.



10. FOLD BOTH SHIELDS BACK OVER THE NECK OF THE CONNECTOR BODY.



11. SLIDE THE FERRULE UP OVER THE SHIELDS AND AGAINST THE CONNECTOR BODY. TRIM AWAY ANY EXCESS BRAID. CRIMP THE FERRULE ONCE, NEXT TO THE BODY, USING A M22520/5-09 DIE (A HEX) IN A M22520/5-01 TOOL FRAME. APPLY ADHESIVE HEAT SHRINK.



**NOTES**

- 1. ADHESIVE HEAT SHRINK SHOULD BE APPLIED IN ACCORDANCE WITH ECS WORK INSTRUCTION W1007. CONTACT ECS FOR A COPY OF THIS WORK INSTRUCTION.
- 2. ENSURE HEATSHRINK IS INSTALLED PRIOR TO CRIMPING CONNECTOR.
- 3. CONNECTOR DIMENSIONS ARE FOR REFERENCE ONLY.

**ALL LENGTHS IN INCHES**

APPROVALS	DATE
DRAWN BY: V. LEX	06/19/01
CHECKED BY: C. CHAPMAN	7/5/01
DESIGNED BY:	
PROJECT ENG:	
ENG. MGR. DAVID E. KNOLL	6/28/01

ELECTRONIC CABLE SPECIALISTS FRANKLIN, WI 53152 PHONE: (414) 421-5300			
<b>TITLE</b> CUSTOMER SPECIFICATION SMA STRAIGHT PLUG FOR ECS CABLE 432101 AND 532101			
SIZE	CAGE CODE	LEVEL	PART NO.
B	66197	C	CSS522
SCALE:	F:\STORAGE\E\SPEC\CONN\INST\CSS522 SHEET 1 OF 1		