DWG NO. CLTS922-I N/C

ZONE REV

N/C NEW RELEASE

ECN

57687

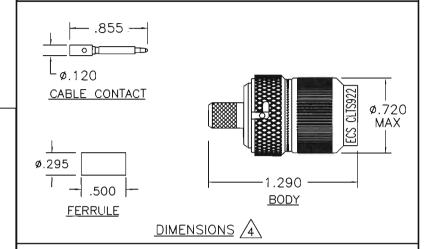
DATE

1/14/16

APPROVED

CAU

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# **SPECIFICATIONS**

# ELECTRICAL

IMPEDANCE: 50 OHMS NOMINAL FREQUENCY RANGE: 0-11 GHz VSWR: 1.2:1 MAXIMUM DC TO 2GHz INSERTION LOSS: .1dB MAXIMUM DC TO 2GHz WORKING VOLTAGE: 500 VRMS @ SEA LEVEL DIELECTRIC WITHSTANDING: 1500 VRMS @ SEA LEVEL INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM

#### **MECHANICAL**

CONNECTOR INTERFACE: DIMENSIONS PER MIL-STD-348B,

FIGURE 313-1

@ 500 VOLTS DC

TERMINATION STYLE: INNER CONTACT-SOLDER OR CRIMP OUTER CONTACT-FERRULE CRIMP

CABLE RETENTION: 40 LBS

### **ENVIRONMENTAL**

TEMPERATURE RATING: -65° TO +165° C VIBRATION: MIL-STD-202, METHOD 204, COND. B 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: BRASS PER ASTM B16

FERRULE: ANNEALED BRASS PER ASTM B16 OR COPPER PER ASTM B124

CENTER CONTACT: BRASS PER ASTM B16 COUPLING & BACK NUT: 303 SST PER ASTM A582 OUTER CONTACT: BERYLLIUM COPPER PER ASTM B196

DIELECTRIC: TEFLON PER ASTM D1710 GASKET: SILICONE RUBBER PER A-A-59588

BODY, FERRULE AND OUTER CONTACT: BRIGHT NICKEL PER SAE-AMS-QQ-N-290

CONTACTS: GOLD PER MIL-DTL-45204

COUPLING & BACK NUT: PASSIVATE PER SAE-AMS-2700

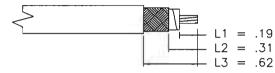
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# INSTALLATION INSTRUCTIONS

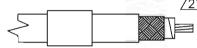
1. BEGIN BY CUTTING THE CABLE OFF SQUARE.



2. WHEN USING AUTOMATIC STRIPPING EQUIPMENT. STRIP CABLE AS SHOWN STARTING WITH L1 AND ENDING WITH L3. TAKE CARE NOT TO NICK THE CONDUCTORS WHILE STRIPPING THE DIELECTRIC AND JACKET. IF AUTOMATIC STRIPPING EQUIPMENT IS NOT AVAILABLE, STRIP ONLY L1 AND L3 AND TRIM EXCESS BRAID AT STEP 10.



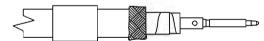
3. SLIDE THE FERRULE AND ADHESIVE SHRINK TUBING OVER THE END OF THE CABLE.



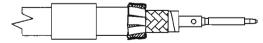
4. SOLDER THE CONTACT ONTO THE CENTER CONDUCTOR, PER MIL-STD-2000, USING 63Sn/37Pb SOLDER OR CRIMP WITH M22520/5-59 DIE (B HEX). ENSURE THE CONTACT IS BUTTED AGAINST THE CABLE DIELECTRIC. CLEAN ALL FLUX RESIDUES USING AN APPROPRIATE FLUX CLEANER.



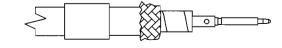
5. USING TWEEZERS, FOLD THE OUTER BRAID BACK OVER THE CABLE JACKET, LEAVING AS MUCH WEAVE AS POSSIBLE.



6. SLICE THE ALUMINUM/POLYESTER FOIL LENGTHWISE ABOUT EVERY 1/8". GENTLY ROTATE PIN TO SEPARATE THE FLAT FOIL BRAID AND ALUMINUM/POLYESTER FOIL FROM THE DIELECTRIC. USING TWEEZERS, FOLD BACK ALUMINUM/POLYESTER FOIL OVER THE OUTER BRAID.



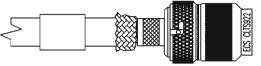
7. USING TWEEZERS, FOLD THE INNER BRAID BACK OVER THE OTHER SHIELDS, LEAVING AS MUCH WEAVE AS POSSIBLE. NOTE: DO NOT UNRAVEL DIELECTRIC WHEN PULLING BACK INNER SHIELD.



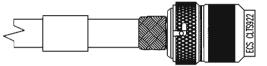
8. SLIDE THE BODY OF THE CONNECTOR OVER THE END OF THE CABLE UNTIL THE NOTCH IN THE CONTACT SEATS INTO THE DIELECTRIC RIDGE INSIDE THE CONNECTOR BODY.

REVISIONS

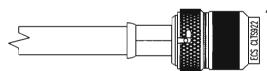
DESCRIPTION



9. FOLD ALL THREE BRAIDS UP OVER THE NECK OF THE CONNECTOR BODY.



10. 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 M22520/5-59 DIE (A HEX) IN A M22520/5-01 TOOL FRAME. APPLY ADHESIVE HEAT SHRINK.



## NOTES

1. ALL DIMENSIONS ARE IN INCHES.

2 ENSURE HEAT SHRINK IS INSTALLED PRIOR TO CRIMPING CONNECTOR.

/3\ ADHESIVE HEAT SHRINK SHOULD BE APPLIED IN ACCORDANCE WITH ECS WORK INSTRUCTION WI007. CONTACT ECS FOR A COPY OF THIS WORK INSTRUCTION.

4 CONNECTOR DIMENSIONS ARE FOR REFERENCE ONLY.

5. PICTORIALS SHOW CONNECTOR INSTALLATION ON ECS 311501 and 311601 CABLE. WHEN INSTALLING THIS CONNECTOR ON 421601 THERE ARE ONLY 2 SHIELDS WHICH SHOULD BE FOLDED BACK AS SHOWN IN STEP 6 AND STEP 7 WOULD BE OMITTED.

6\ WHEN TERMINATING TO 421601 CABLE CENTER CONTACT SHALL BE SOLDERED. DO NOT CRIMP.

