4	3		1

REVISIONS

ECN	ZONE	REV.	DESCRIPTION	DATE	APPROVED
13516		N/C	NEW RELEASE	04/11/01	D. KNOLL
81234	B3 A4	A	UPDATED NOTE 4 CRIMP DIE CALLOUT MATERIAL SPECS UPDATED		

DIMENSIONS ⟨3⟩

ø.468
ø.422
.500
FERRULE

ø.382 .300 ø.672
ø.332
1.090
BODY

ø.129 .953
ø.150
CONTACT

SPECIFICATIONS

ELECTRICAL

IMPEDANCE: 50 OHMS NOMINAL
FREQUENCY RANGE: 0–4 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 @ 500 VOLTS DC

MECHANICAL

CONNECTOR INTERFACE: DIMENSIONS PER MIL–STD–348A, FIGURE 301–1 (BNC)
TERMINATION STYLE: CENTER CONTACT–SOLDER OR CRIMP FERRULE–CRIMP
CABLE RETENTION: 50 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
OUTER CONTACT: BERYLLIUM COPPER PER ASTM B196
DIELECTRIC: TEFLON PER ASTM D1710
GASKET: SILICONE RUBBER PER A–A–59588

FINISHES

BODY, FERRULE AND OUTER CONTACT: BRIGHT NICKEL PER SAE AMS–QQ–N–290
CENTER CONTACT: GOLD PER MIL–DTL–45204

INSTALLATION INSTRUCTIONS

1. BEGIN BY CUTTING THE CABLE OFF SQUARE.

90°
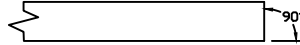
2. WHEN USING AUTOMATIC STRIPPING EQUIPMENT, STRIP CABLE AS SHOWN STARTING WITH L1 AND ENDING WITH L3. TAKE CARE NOT TO NICK THE CONDUCTORS WHILE STRIPPING THE DIELECTRIC AND JACKET. IF AUTOMATIC STRIPPING EQUIPMENT IS NOT AVAILABLE, STRIP ONLY L1 AND L3 AND TRIM EXCESS BRAID AT STEP 10.

L1 = .19
L2 = .31
L3 = .62
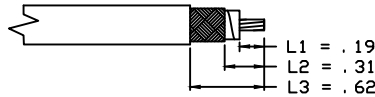
3. SLIDE THE FERRULE AND ADHESIVE SHRINK TUBING OVER THE END OF THE CABLE. ⟨1⟩
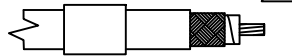
4. ENSURE THAT THE CONTACT IS BUTTED AGAINST THE DIELECTRIC. TERMINATE CONTACT PER OPTION a OR b BELOW.

   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 M22520/5–06 DIE (A HEX). IN A M22520/5–01 TOOL FRAME.
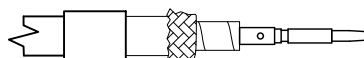

5. USING TWEEZERS, FOLD THE OUTER BRAID BACK OVER THE CABLE JACKET, LEAVING AS MUCH WEAVE AS POSSIBLE.

6. SLICE THE ALUMINUM/POLYESTER FOIL LENGTHWISE ABOUT EVERY 1/8". USING TWEEZERS, FOLD BACK ALUMINUM/POLYESTER FOIL OVER THE OUTER BRAID.
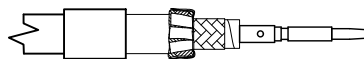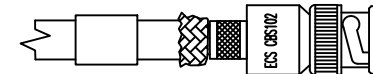

7. USING TWEEZERS, FOLD THE INNER BRAID BACK OVER THE OTHER SHIELDS, LEAVING AS MUCH WEAVE AS POSSIBLE. NOTE: DO NOT UNRAVEL DIELECTRIC WHEN PULLING BACK INNER SHIELD.
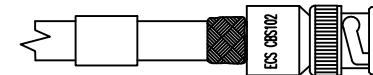

8. SLIDE THE BODY OF THE CONNECTOR OVER THE END OF THE CABLE UNTIL THE NOTCH IN THE CONTACT SEATS INTO THE DIELECTRIC RIDGE INSIDE THE CONNECTOR BODY.

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 THE M22520/5–51 DIE IN A M22520/5–01 TOOL FRAME. APPLY ADHESIVE HEAT SHRINK. ⟨2⟩
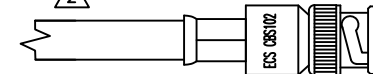
NOTES

⟨1⟩ ENSURE HEAT SHRINK IS INSTALLED PRIOR TO CRIMPING CONNECTOR.

⟨2⟩ ADHESIVE HEAT SHRINK SHOULD BE APPLIED IN ACCORDANCE WITH ECS WORK INSTRUCTION WI007. CONTACT ECS FOR A COPY OF THIS WORK INSTRUCTION.

⟨3⟩ CONNECTOR DIMENSIONS ARE FOR REFERENCE ONLY.

ALL LENGTHS IN INCHES

ELECTRONIC CABLE SPECIALISTS
FRANKLIN, WI 53132
PHONE: (414) 421–5300

APPROVALS	DATE
DRAWN BY: C CHAPAMN	04/04/01
CHECKED BY: D. KNOLL	04/11/01
DESIGNED BY:	
PROJECT ENG:	
ENG. MGR: D. KNOLL	04/11/01

TITLE: **CUSTOMER SPECIFICATION**
BNC STRAIGHT PLUG
FOR ECS CABLE 311001

SIZE	CAGE CODE	LEVEL	PART NO.
B	66197	C	CBS102

SCALE: | EFFECTIVITY: | SHEET: 1 OF 1

4	3	2	1