PART NUMBER	ITEM ① BODY	ITEM ② SLIDER	ITEM ③ CONTACT	ITEM ④ INSULATOR	ITEM ⑤ RETENTION SPRINGS	ITEM ⑥ COUPLING NUT	ITEM ⑦ CRIMP SLEEVE
142-1408-001	BRASS GOLD PL .00001 MIN OVER NICKEL PL .00005 MIN OVER COPPER PL .00005 MIN	BRASS NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN	BERYLLIUM COPPER GOLD PL .00005 MIN OVER NICKEL PL .00005 MIN OVER COPPER PL .00005 MIN	TEFLON	BERYLLIUM COPPER UNPLATED	BERYLLIUM COPPER NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN	BRASS NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN

DRAWING NO.
C – 142-1408-001/010

0	REVISIONS				
ENGINEERING RELEASE					
1	03-02-04	T A K			ECN 49136

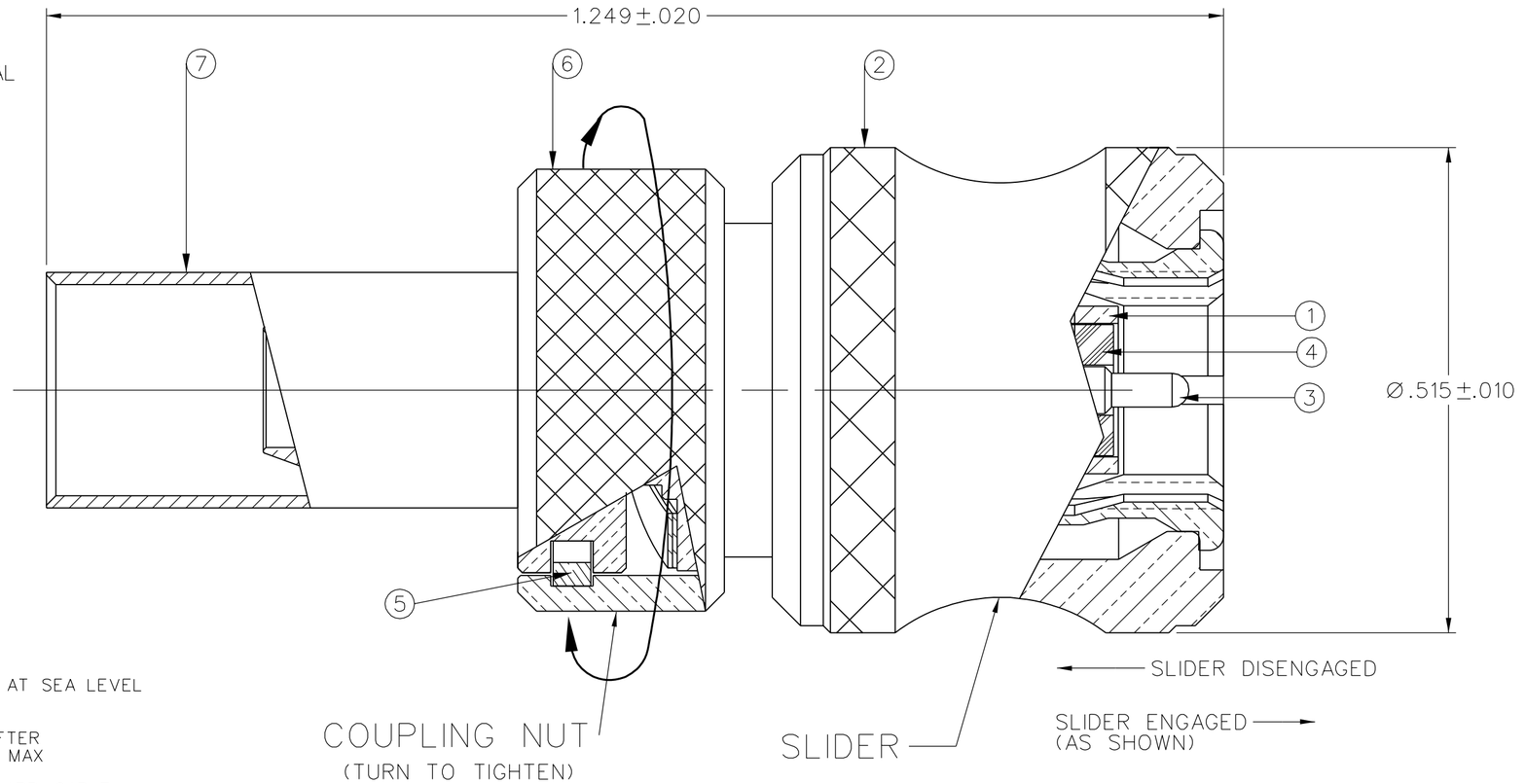
INSTRUCTIONS FOR USE:

1. WITH SLIDER AT THE ENGAGED POSITION, THE CONNECTOR FUNCTIONS LIKE A STANDARD SMA CONNECTOR. TIGHTEN (SPIN) THE KNURLED COUPLING NUT BY HAND TO OBTAIN FULL MATING ENGAGEMENT OR DISENGAGEMENT.
2. QUICK CONNECT:
   A. WITH SLIDER AT THE DISENGAGED POSITION, SLIDE THE CABLED CONNECTOR ONTO AN SMA JACK RECEPTACLE, OVER THE JACK THREADS BY PUSHING ON THE BACK OF THE KNURLED NUT.
   B. ENGAGE THE SLIDER WHILE MAINTAINING LIGHT FORWARD PRESSURE ON THE NUT. THIS ACTION IS DONE BY SLIPPING YOUR FINGERS FROM THE NUT TO THE SLIDER IN ONE MOTION.
   C. ONCE THE SLIDER IS ENGAGED THE KNURLED NUT CAN BE TURNED 1 TURN OR LESS TO OBTAIN FULL ENGAGEMENT SMA PERFORMANCE.
   D. DISENGAGE THE CONNECTOR BY FIRST LOOSENING THE KNURLED NUT A PARTIAL TURN. THEN DISENGAGE THE SLIDER AND REMOVE THE CONNECTOR.

CAUTION:

1. THIS SMA PLUG CONNECTOR IS DESIGNED FOR HIGH DURABILITY AND LONG LIFE IN TEST APPLICATIONS.

   HOWEVER, IT IS DESIGNED FOR LIMITED MATINGS WITH A SINGLE JACK RECEPTACLE. AN SMA JACK RECEPTACLE MAY EXPERIENCE THREAD PLATING WEAR AFTER MANY ENGAGEMENTS.



NOTES:

1. SPECIFICATIONS:

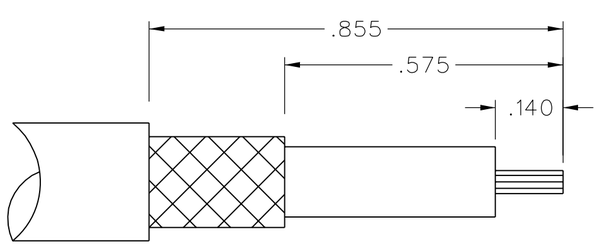
IMPEDANCE: 50 OHMS
FREQUENCY RANGE: 0-12.4 GHz
VSWR: 1.15+.01 F MAX (F IN GHz)
WORKING VOLTAGE: 335 VRMS MAX AT SEA LEVEL
DIELECTRIC WITHSTANDING VOLTAGE: 1000 VRMS MIN AT SEA LEVEL
INSULATION RESISTANCE: 5000 MEGOHM MIN
CONTACT RESISTANCE:
CENTER CONTACT - INITIAL 3.0 MILLIOHM MAX, AFTER ENVIRONMENTAL 4.0 MILLIOHM MAX
OUTER CONDUCTOR - INITIAL 2.0 MILLIOHM MAX
AFTER ENVIRONMENTAL NOT APPLICABLE
BODY TO CABLE - 0.5 MILLIOHM MAX (GOLD PLATED)
5.0 MILLIOHM MAX (NICKEL PLATED)
CORONA LEVEL: 250 VOLTS MIN AT 70,000 FEET
INSERTION LOSS: .06 $\sqrt{F}$ MAX (F IN GHz) AT 6 GHz
RF LEAKAGE: -60 DB MIN AT 2.5 GHz
RF HIGH POTENTIAL WITHSTANDING VOLTAGE: 670 VRMS MIN AT 4 AND 7 MHz

MECHANICAL:

ENGAGE/DISENGAGE TORQUE: 2 INCH-POUNDS MAX
MATING TORQUE: 7-10 INCH POUNDS
COUPLING PROOF TORQUE: 15 INCH-POUNDS MIN
COUPLING NUT RETENTION: 60 LBS MIN
CONTACT RETENTION: 6 LBS MIN AXIAL FORCE
CABLE ACCEPTABILITY: RG 55/U, RG 142/U
RG 223/U, RG 400/U
CABLE HEX CRIMP SIZE: .213
CABLE RETENTION: 45 LBS MIN AXIAL FORCE
DURABILITY: 500 CYCLES MIN

ENVIRONMENTAL:

(MEETS OR EXCEEDS THE APPLICABLE PARAGRAPH OF MIL-PRF-39012)
THERMAL SHOCK: MIL-STD-202, METHOD 107, CONDITION B, EXCEPT 85° C HIGH TEMP
OPERATING TEMPERATURE: -65° C TO 165° C
CORROSION: MIL-STD-202, METHOD 101, CONDITION B
SHOCK: MIL-STD-202, METHOD 213, CONDITION I
VIBRATION: MIL-STD-202, METHOD 204, CONDITION D
MOISTURE RESISTANCE: MIL-STD-202, METHOD 106



CABLE STRIP DIMENSIONS
4:1

CUSTOMER DRAWING

THIS DRAWING TO BE INTERPRETED PER ASME Y 14.5M - 1994

"μSTATION"

COMPANY CONFIDENTIAL

TOLERANCE UNLESS OTHERWISE SPECIFIED		DRAWN BY	DATE
DECIMALS	mm	T.A.Kari	9-18-02
.XX		CHECKED BY	DATE
.XXX			
MATL		APPROVED BY	DATE
		T.A.Kari	3-2-04
FINISH		RELEASE DATE	3-2-04
		U/M INCH	SCALE 8:1

EMERSON Network Power
Connectivity Solutions
P.O. Box 1732
Waseca, MN 56093
1-800-247-8256

TITLE
PLUG ASSEMBLY, SMA, QUICK CONNECT COUPLING NUT, STRAIGHT CABLE, RG 142, CRIMP

SHEET	DRAWING NO.
2 OF 2	C – 142-1408-001/010