

PART NUMBER	ITEM ① BODY	ITEM ② SLIDER	ITEM ③ CONTACT	ITEM ④ INSULATOR TEFLON	ITEM ⑤ RETENTION SPRINGS BERYLLIUM COPPER UNPLATED	ITEM ⑥ COUPLING NUT BERYLLIUM COPPER NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN	ITEM ⑦ CRIMP SLEEVE COPPER NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN
142-1404-001	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				

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.

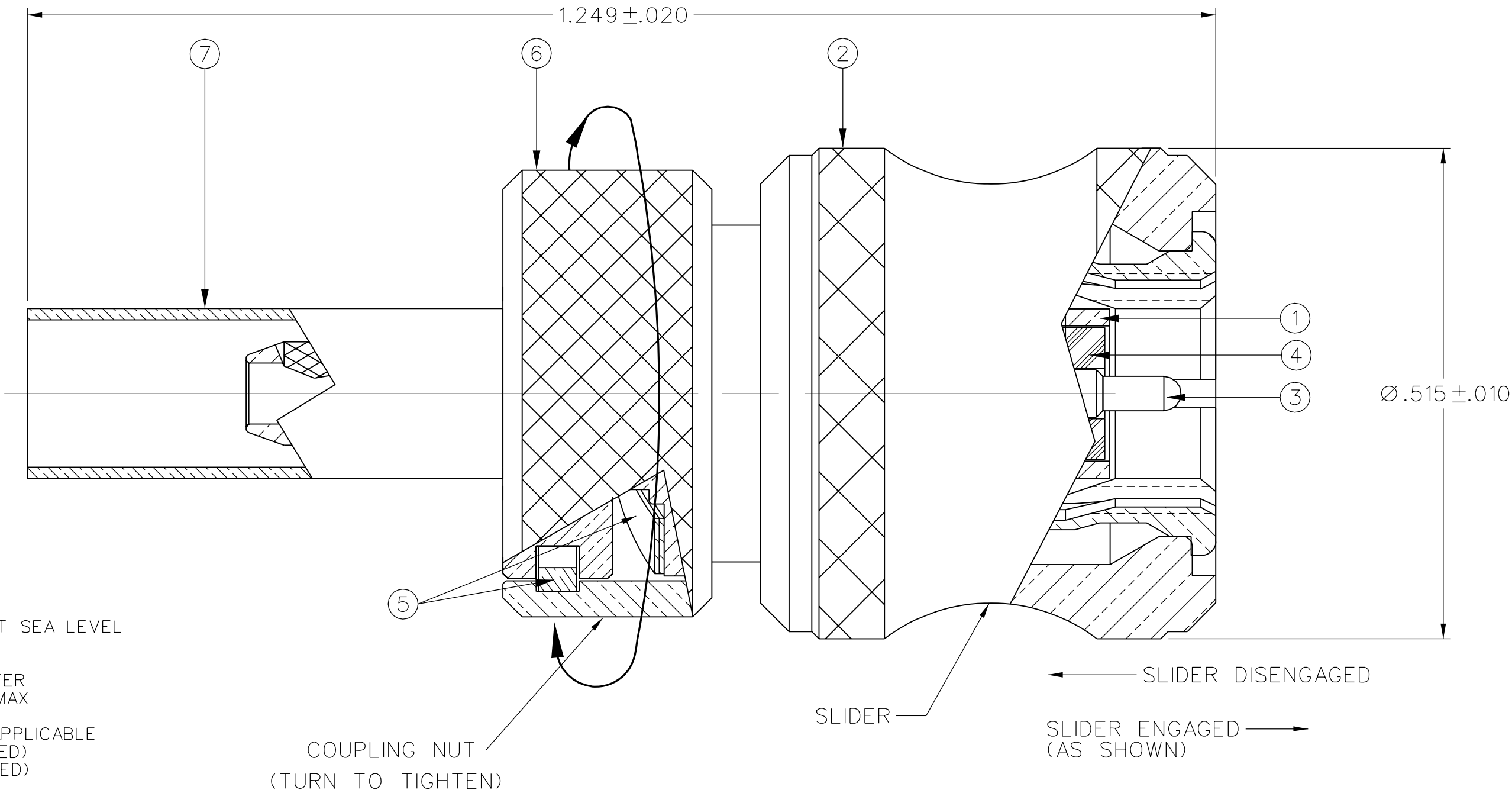
B. ENGAGE THE SLIDER WHILE MAINTAINING LIGHT FORWARD PRESSURE ON THE NUT. THIS ACTION IS DONE BY  
SLIPPING YOUR FINGERS FROM THE NUT TO THE SLIDER IN ONE MOTION.

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:

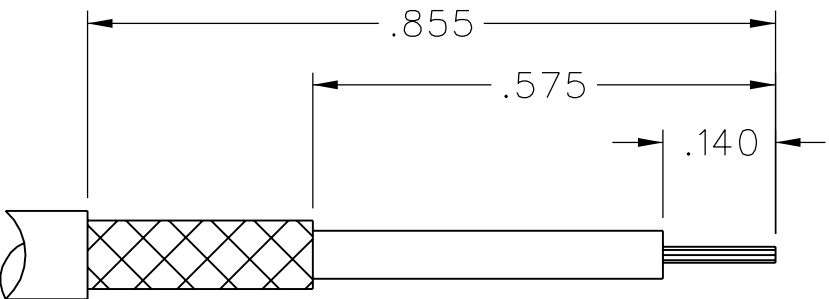
1. SPECIFICATIONS:
- IMPEDANCE: 50 OHMS  
FREQUENCY RANGE: 0-12.4 GHz  
VSWR: 1.15+.02 F MAX (F IN GHz)  
WORKING VOLTAGE: 250 VRMS MAX AT SEA LEVEL  
DIELECTRIC WITHSTANDING VOLTAGE: 750 VRMS MIN AT SEA LEVEL  
INSULATION RESISTANCE: 5000 MEGOHM MIN  
CONTACT RESISTANCE:  
CENTER CONTACT - INITIAL 3.0 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: 190 VOLTS MIN AT 70,000 FEET  
INSERTION LOSS: .06 √ F dB MAX (F IN GHz) AT 6 GHz  
RF LEAKAGE: -60 DB MIN AT 2.5 GHz  
RF HIGH POTENTIAL WITHSTANDING VOLTAGE: 500 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  
CABLE ACCEPTABILITY: RG 316/U DOUBLE SHIELDED  
RG 188/U DOUBLE SHIELDED  
CABLE HEX CRIMP SIZE: .151  
CABLE RETENTION: 20 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

DRAWING NO.  
C - 142-1404-001/010

0 REVISIONS

ENGINEERING RELEASE


1 03-02-04 T A K ECN 49130

CUSTOMER DRAWING

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

"μSTATION"

COMPANY CONFIDENTIAL

TOLERANCE UNLESS OTHERWISE SPECIFIED		DRAWN BY	DATE	 <b>Connectivity Solutions</b> P.O. Box 1732 Waseca, MN 56093 1-800-247-8256	
DECIMALS	mm	T.A.Kari	12-22-03		
.XX	_____	CHECKED BY	DATE	TITLE STRAIGHT CABLED PLUG QUICK CONNECT COUPLING SMA, RG 316DS, CRIMP TYPE	
.XXX	_____	APPROVED BY	DATE		
MATL	_____	RELEASE DATE	12-22-03	SHEET 1 OF 2	DRAWING NO. C - 142-1404-001/010
FINISH	_____	U/M INCH	SCALE 8:1		