

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				

DRAWING NO. C - 142-1404-001/010					
0	REVISIONS				
ENGINEERING RELEASE					
1	03-02-04	T K			ECN 49130

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:

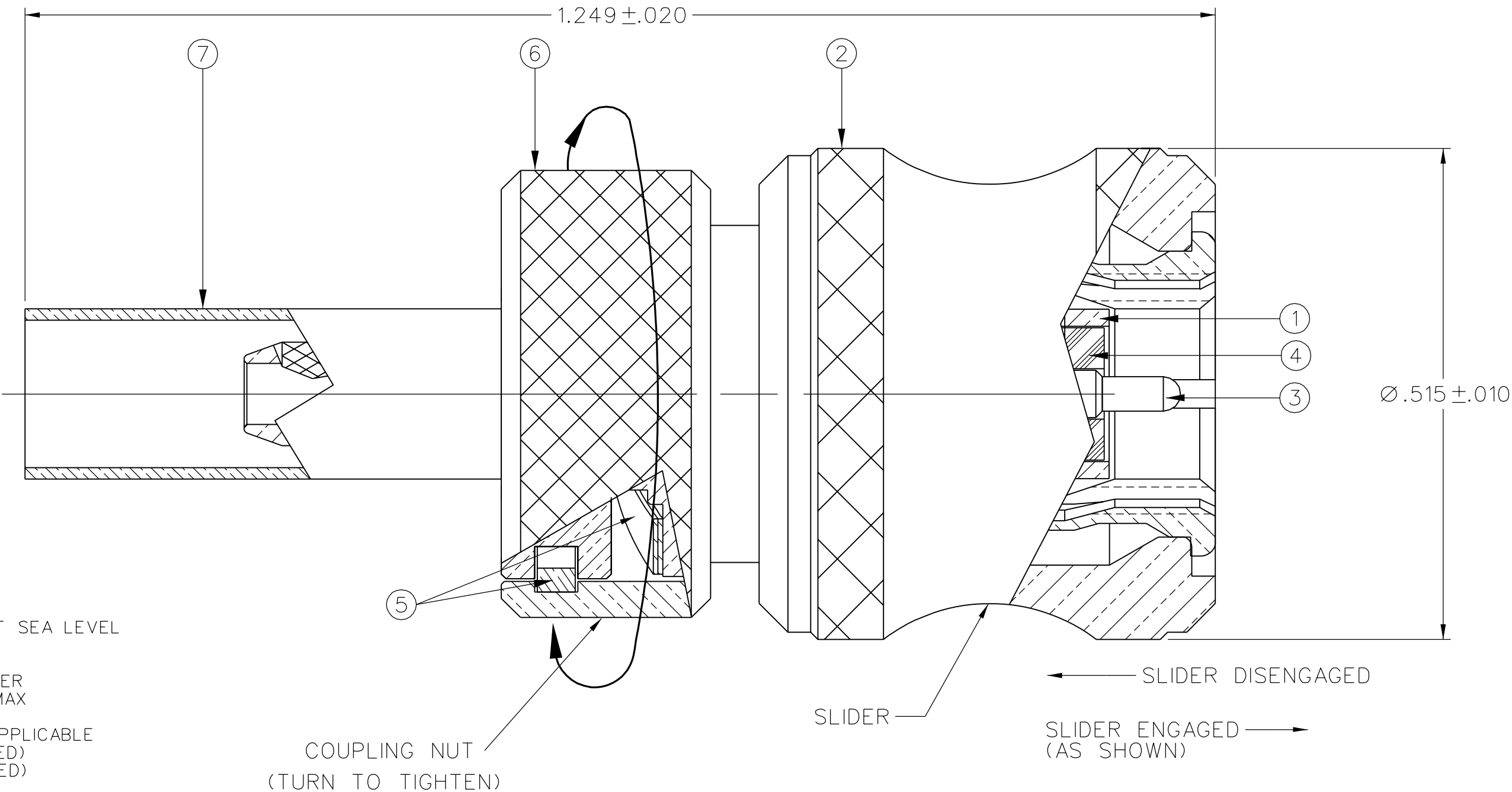
IMPEDANCE: 50 OHMS
FREQUENCY RANGE: 0-12.4 GHz
VSWR: 1.15+.02 F MAX (F IN GHz)
WORKING VOLTAGE: 250 VRMS MAX AT SEA LEVEL
DIELECTRIC WITHSTANDING VOLTAGE: 750 VRMS MIN AT SEA LEVEL
INSULATION RESISTANCE: 5000 MEGOHM MIN
CONTACT RESISTANCE:
CENTER CONTACT - INITIAL 3.0 MILLIOHM MAX, AFTER
ENVIRONMENTAL 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

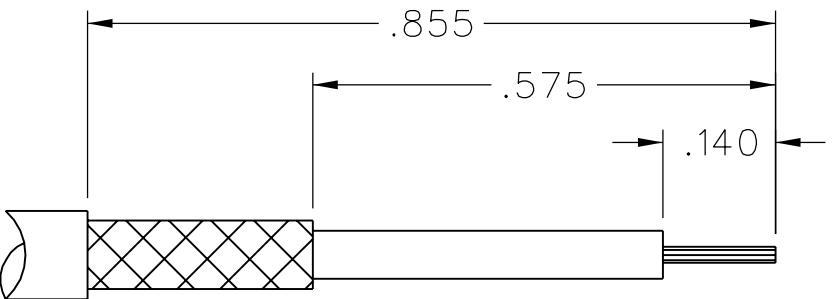
ENVIRONMENTAL:

(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



COUPLING NUT
(TURN TO TIGHTEN)

SLIDER
SLIDER DISENGAGED
SLIDER ENGAGED
(AS SHOWN)



CABLE STRIP DIMENSIONS

4:1

CUSTOMER DRAWING

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

"μSTATION"

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