

DRAWING NO.
C - 142-1407-001/010

0 REVISIONS

ENGINEERING RELEASE

1 03-02-04 [A] [K] [] [] ECN 49132

UPDATE SLEEVE 1.099 WAS 1.249

* REVISION NUMBER FOLLOWED BY AN ALPHA *
* CHARACTER INDICATES DRAWING CLARIFICATION *
* CAUTION OR PART NUMBER ADDITION ONLY. *

1a 1-13-05 [T] [K] [] [] 12-8-04
ECN 49578

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
142-1407-001	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	COPPER NICKEL PL .0001 MIN OVER COPPER PL .00005 MIN

INSTRUCTIONS FOR USE:

- 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.
- QUICK CONNECT:
 - 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.
 - 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.
 - ONCE THE SLIDER IS ENGAGED THE KNURLED NUT CAN BE TURNED 1 TURN OR LESS TO OBTAIN FULL ENGAGEMENT SMA PERFORMANCE.
 - DISENGAGE THE CONNECTOR BY FIRST LOOSENING THE KNURLED NUT A PARTIAL TURN, THEN DISENGAGE THE SLIDER AND REMOVE THE CONNECTOR.

CAUTION:

- 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:

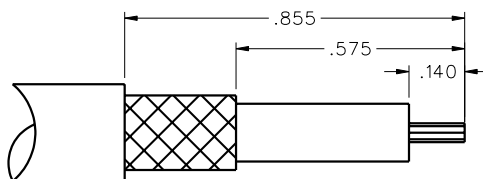
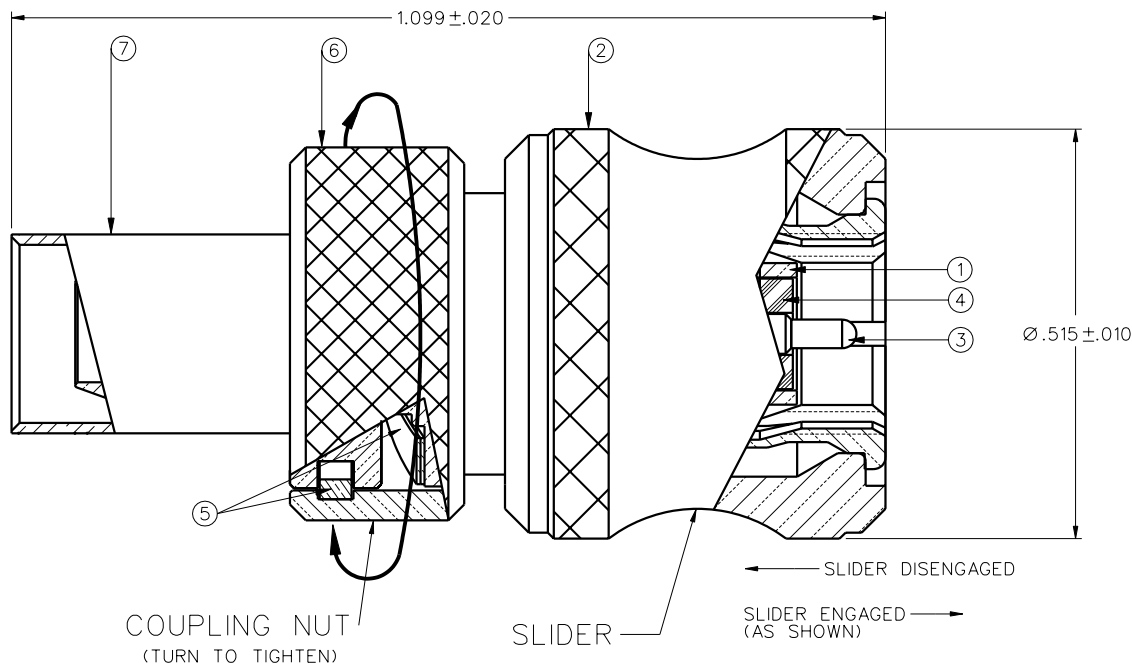
IMPEDANCE: 50 OHMS
 FREQUENCY RANGE: 0-12.4 GHz
 VSWR: 1.15±.01 F MAX (F IN GHz)
 WORKING VOLTAGE: 335 VRMS MAX AT SEA LEVEL
 DIELECTRIC WITHSTANDING VOLTAGE: 1000 VRMS MIN AT SEA LEVEL
 INSULATION RESISTANCE: 5000 MEGOHM MIN
 CONTACT RESISTANCE:
 CENTER CONTACT - INITIAL 3.0 MILLIOHM MAX, AFTER ENVIRONMENTAL 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 √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 58/U, RG 141/U, RG 303/U,
 CABLE HEX CRIMP SIZE: .213
 CABLE RETENTION: 40 LBS MIN AXIAL FORCE
 DURABILITY: 500 CYCLES MIN

ENVIRONMENTAL:

(MEETS OR EXCEEDS THE APPLICABLE PARAGRAPH OF MIL-C-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 ANSI Y 14.5M - 1982

"μ STATION"

COMPANY CONFIDENTIAL

TOLERANCE UNLESS OTHERWISE SPECIFIED		DRAWN BY	DATE	<p><small>Cinch Connectivity Solutions 299 Johnson Ave. Ste. 100 Waseca, MN 56093 1-800-247-8256</small></p>
DECIMALS	mm	T.A.Kari	9-18-02	
.XX	_____	CHECKED BY	DATE	TITLE
.XXX	_____	APPROVED BY	DATE	STRAIGHT CABLED PLUG QUICK CONNECT COUPLING SMA, RG 58, CRIMP TYPE
MATL	_____	APPROVED BY	DATE	CODE NO.
FINISH	_____	T.A.Kari	3-02-04	DRAWING NO.
		RELEASE DATE	3-02-04	C - 142-1407-001/010
				SCALE 8:1 U/M INCH SHEET 2 OF 2