

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

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\* REVISION NUMBER FOLLOWED BY AN ALPHA \*  
\* CHARACTER INDICATES DRAWING CLARIFICATION \*  
\* CAUTION OR PART NUMBER ADDITION ONLY. \*  
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1a 1-13-05 [A] [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:

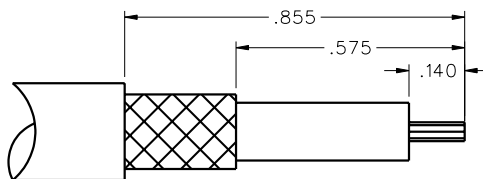
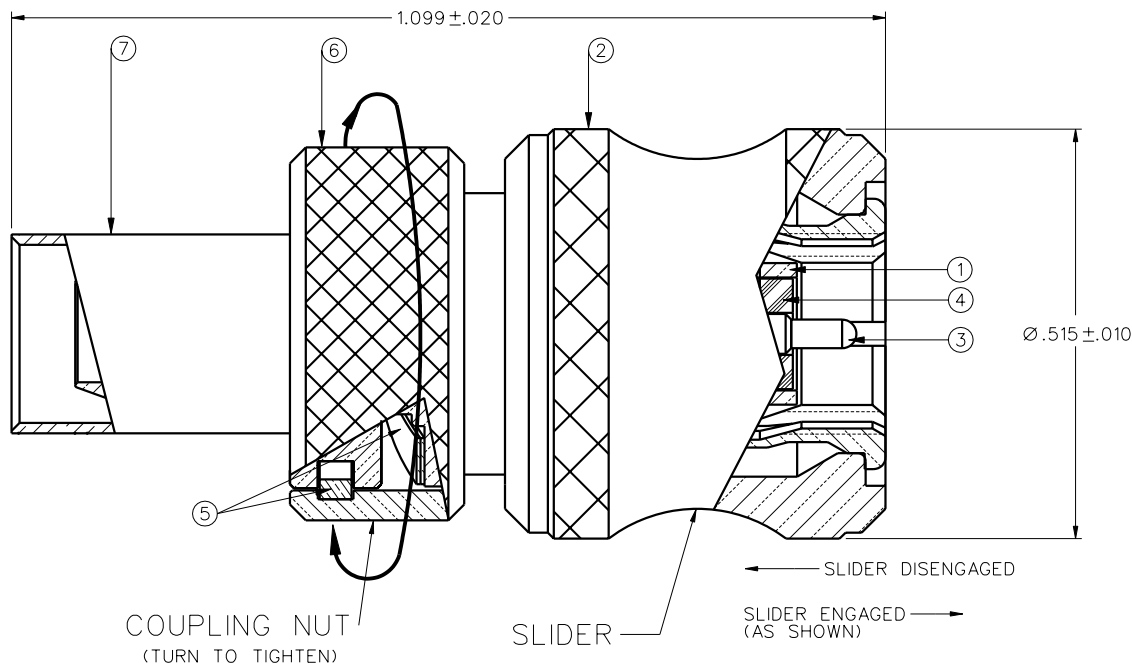
IMPEDANCE: 50 OHMS  
 FREQUENCY RANGE: 0-12.4 GHz  
 VSWR: 1.15±.01 F MAX (F IN GHz)  
 WORKING VOLTAGE: 335 VRMS MAX AT SEA LEVEL  
 DIELECTRIC WITHSTANDING VOLTAGE: 1000 VRMS MIN AT SEA LEVEL  
 INSULATION RESISTANCE: 5000 MEGOHM MIN  
 CONTACT RESISTANCE:  
 CENTER CONTACT - INITIAL 3.0 MILLIOHM MAX, 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 ANSII 14.5M - 1982

"μ STATION"

COMPANY CONFIDENTIAL

TOLERANCE UNLESS OTHERWISE SPECIFIED		DRAWN BY	DATE
DECIMALS	mm	T.A.Kari	9-18-02
.XX	_____	CHECKED BY	DATE
.XXX	_____	APPROVED BY	DATE
MATL	_____	APPROVED BY	DATE
FINISH	_____	T.A.Kari	3-02-04
		RELEASE DATE	3-02-04

**JOHNSON**  
 Cinch Connectivity Solutions  
 299 Johnson Ave. Ste. 100  
 Waseca, MN 56093  
 1-800-247-8256

TITLE STRAIGHT CABLED PLUG QUICK CONNECT COUPLING SMA, RG 58, CRIMP TYPE

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

SCALE 8:1 U/M INCH SHEET 2 OF 2