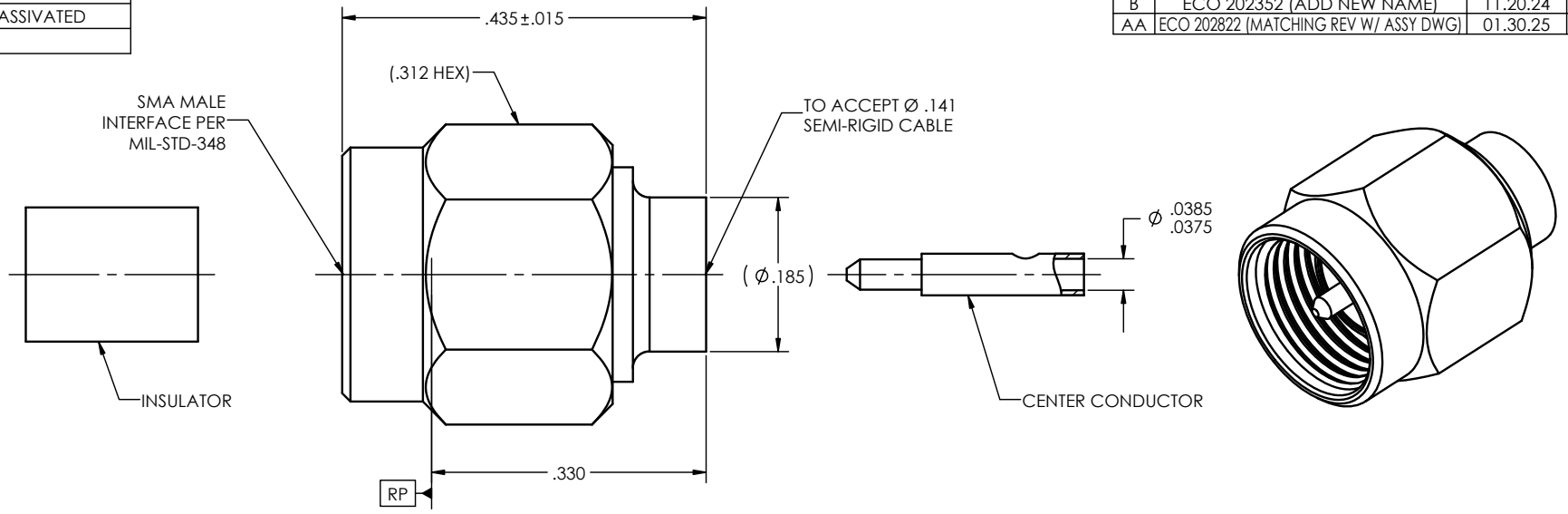
PART NO.	COUPLING NUT FINISHED
BASIC	GOLD
SF	PASSIVATED

REVISIONS			
REV.	DESCRIPTION	DATE	BY
A	ECO 19630	10.04.06	DKN
B	ECO 202352 (ADD NEW NAME)	11.20.24	DKN
AA	ECO 202822 (MATCHING REV W/ ASSY DWG)	01.30.25	DKN



NOTE(S) :
CENTER CONDUCTOR AND INSULATOR TO BE PACKAGED AND SHIPPED UNASSEMBLED.

MATERIAL(S):

Body & Coupling Nut:
303 SST per ASTM A-582
Center Conductor:
Brass Alloy per ASTM B-16
Retaining Ring:
BeCu Alloy per ASTM B-196 or ASTM B-197
Gasket:
Silicone Rubber per A-A-59588
Insulator:
PTFE Teflon per ASTM D-1710 or ASTM D-1457

ELECTRICAL(S):

Impedance: 50 Ohms Nominal
Frequency Range: DC to 18.0 GHz
VSWR: 1.05 + .005 x f(GHz)
Insertion Loss: .03 x f(GHz) dB
Working Voltage: 335 Vrms max @ Sea Level
Dielectric Withstand Voltage: 1,000 Vrms min.
RF HiPot Voltage: 670 Vrms min. @ 5MHz
Corona Level: 250 Vrms @ 70,000 ft
Insulation Resistance: 5,000 MegOhms min.
RF Leakage: -(90 -fGHz) dB
Contact Resistance:
Initial:
Center Contact: 3.0 Milliohms max
Outer Contact: 2.0 Milliohms max
After Environment:
Center Contact: 4.0 Milliohms max
Outer Contact: NA

MECHANICAL(S):

Mating Characteristics:
Interface per MIL-STD-348
Force to Engage & Disengage:
Torque: 2 inch-lbs max
Longitudinal Force: NA
Connector Durability:
500 Cycles min. @ 12 cycles/minute max
Permeability: Less than 2.0 mu.
Coupling Proof Torque: 15 inch-pounds min.
Coupling Mech. Retention: 60 pounds min.

ENVIRONMENTAL(S):

Temperature Range: -65°C to +165°C
Thermal Shock:
MIL-STD-202, Method 107, Test Condition B, except high temperature shall be +115°C
Moisture Resistance:
MIL-STD-202, Method 106, Insulation resistance at least 200 MegOhms within 5 minutes after removal from humidity.
Corrosion:
MIL-STD-202, Method 101, Test Condition B
Vibration:
MIL-STD-202, Method 204, Test Condition D
Shock:
MIL-STD-202, Method 213, Test Condition I

FINISH(ES):

Coupling Nut:
(for BASIC): Gold plate per ASTM B-488, Typer II, Code C, Class .25; over Nickel plate per SAE AMS-QQ-N-290, Class 1.
(for SF): Passivated per ASTM A-967.
Body & Center Conductor:
Gold plate per ASTM B-488, Typer II, Code C, Class .25; over Nickel plate per SAE AMS-QQ-N-290, Class 1.

APPLICABLE Amphenol CDI DOCUMENTS		
WORK STANDARD	PROD INSTRUC	ASSY INSTRUC
NA	NA	AI-111
-		

TOLERANCES AND NOTES
EXCEPT AS NOTED
DIMENSIONS ARE IN INCHES.
XX ± .015
LINEAR .XXX ± .005 ANGULAR ± 1/2°
FRACTION ± 1/32
INTERPRET DRAWING PER ASME Y14.5 - 2018
1. MACHINE FINISH: 63 RMS
2. BREAK ALL SHARP EDGES .003 MAX.
3. MACHINED FILLETS .005 MAX.
4. MACHINED SURFACES SQUARE TO RESPECTIVE AXIS WITHIN .005 INCHES PER INCH.
5. MACHINED DIAMETERS CONCENTRIC WITHIN .002 T.I.R.
6. DIMENSIONS TO BE MET BEFORE PLATING.
7. CHAMFER ALL THREADS 45°.
8. THREADS PER H-28
9. REMOVE FRAYED EDGES ON TEFLON.
10. REMOVE ALL BURRS.

MATERIAL		
APPROVAL	INITIALS	DATE
DRAWN BY	IMG	03.12.02
CHECKED BY	-	-
TEST ENGR	-	-
QUALITY	-	-
DESIGN ENG	DNg	12.01.08
MFG. ENGR	-	-
ECO APPRV	DNg	02.05.25

-	-	-
	SPECIFICATION	PROCUREMENT

Amphenol CDI 12900 Alondra Blvd. Cerritos, CA 90703

TITLE: SMA MALE STRAIGHT TO Ø .141 SEMI-RIGID CABLE (W/ CONTACT)

SCALE	SUB-DIRECTORY/	SHEET
10:1	_OUTLINE\	1 OF 1

SIZE	CAGE CODE	DRAWING NO.	REV.
C	30990	5285-1	AA

ENG-SW REV. H