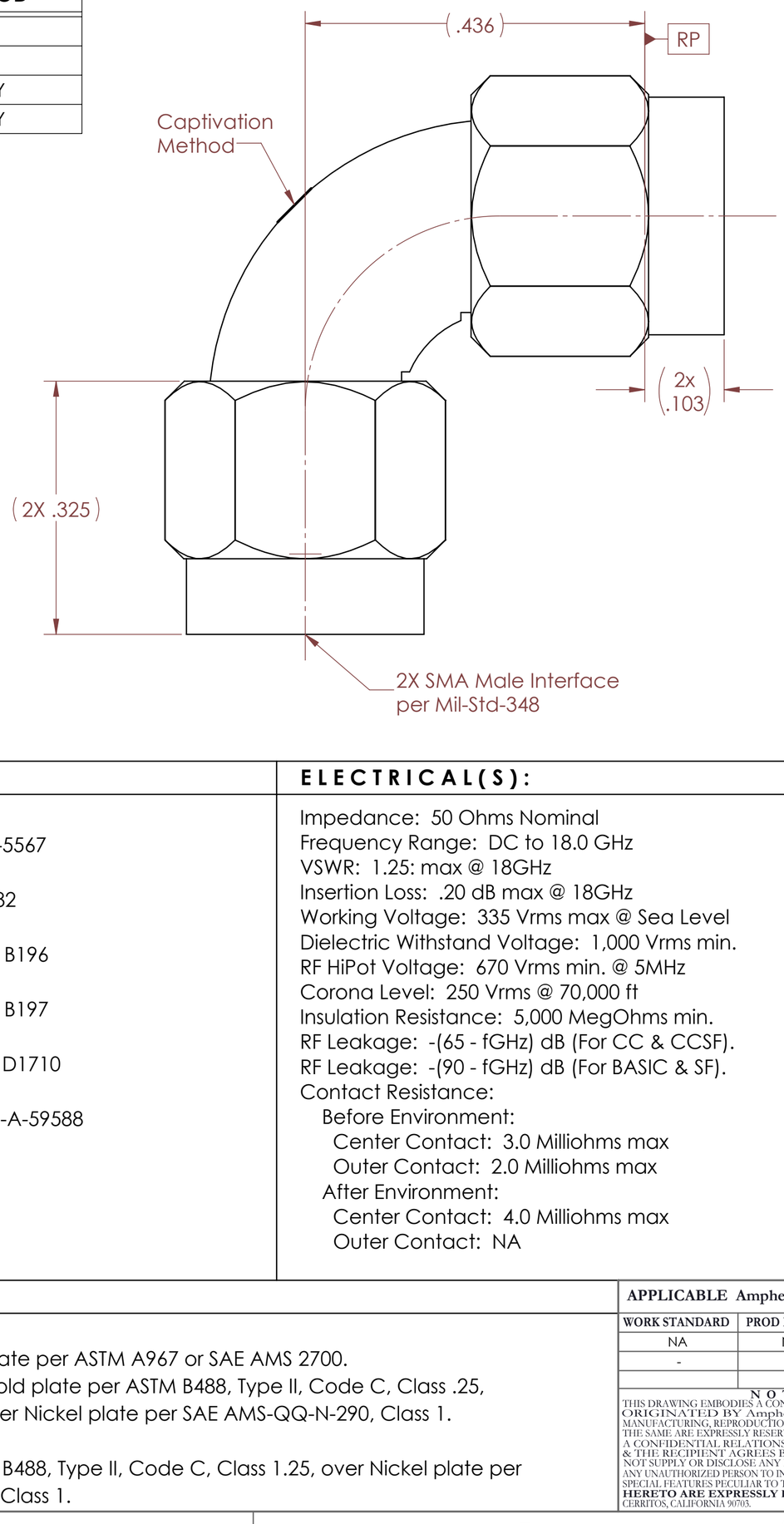
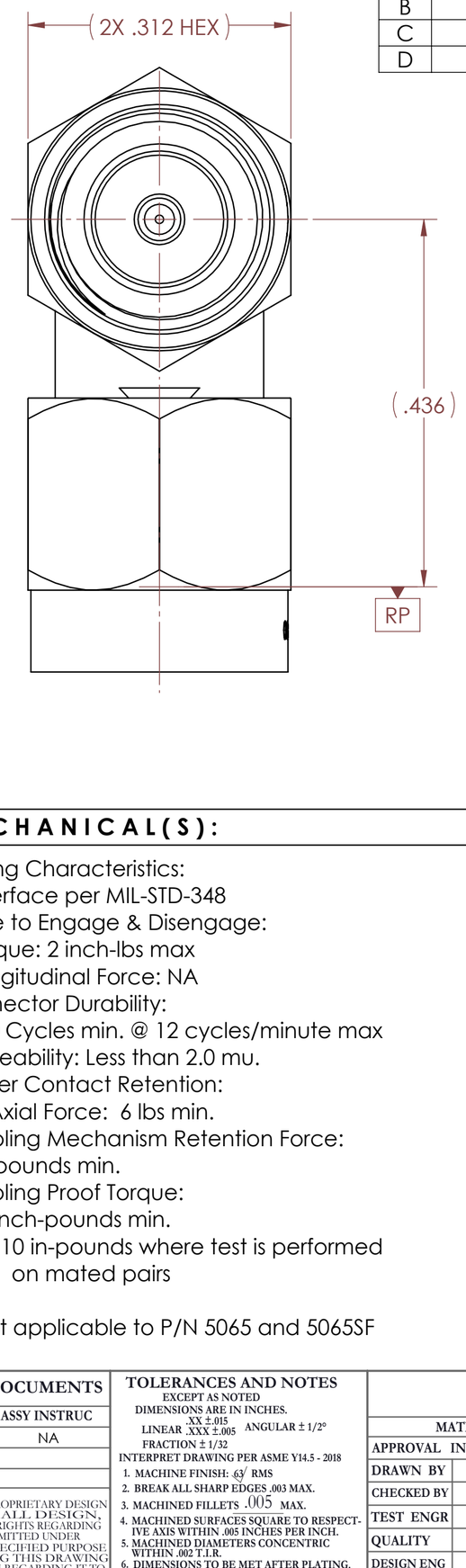
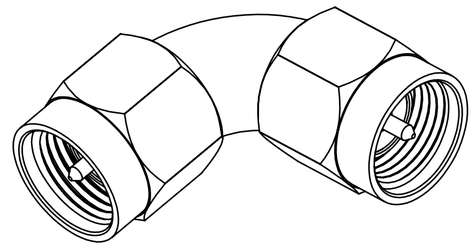
PART NO.	CAPTIVATION METHOD
BASIC	NONE
SF	NONE
CC	EPOXY ONLY
CCSF	EPOXY ONLY

REVISIONS			
REV.	DESCRIPTION	DATE	BY
B	ECO 24118	02.07.11	ABN
C	ECO 27337	10.16.13	DKN
D	ECO 204053 (CHG NAME)	6/30/2025	DKN







MATERIAL(S):

Body:
304 SST per SAE-AMS-5567
Coupling Nut:
303 SST per ASTM A582
Center Conductor:
BeCu Alloy per ASTM B196
Retaining Ring:
BeCu Alloy per ASTM B197
Dielectric:
PTFE Teflon per ASTM D1710
Gasket:
Silicone rubber per A-A-59588
Epoxy: (CC's version)
Sigma VF type HV

ELECTRICAL(S):

Impedance: 50 Ohms Nominal
Frequency Range: DC to 18.0 GHz
VSWR: 1.25: max @ 18GHz
Insertion Loss: .20 dB max @ 18GHz
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: -(65 - fGHz) dB (For CC & CCSF).
RF Leakage: -(90 - fGHz) dB (For BASIC & SF).
Contact Resistance:
Before Environment:
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.
Center Contact Retention:
** Axial Force: 6 lbs min.
Coupling Mechanism Retention Force:
60 pounds min.
Coupling Proof Torque:
15 inch-pounds min.
7 - 10 in-pounds where test is performed on mated pairs

** Not applicable to P/N 5065 and 5065SF

ENVIRONMENTAL(S):

Temperature Range:
For BASIC & SF: -65°C to +165°C
For CC & CCSF: -65°C to +125°C
Thermal Shock:
MIL-STD-202, Method 107, Test ConditionB
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):

Body & Coupling Nut:
For SF & CCSF: Passivate per ASTM A967 or SAE AMS 2700.
For BASIC & CCSF: Gold plate per ASTM B488, Type II, Code C, Class .25, over Nickel plate per SAE AMS-QQ-N-290, Class 1.
Center Conductor:
Gold plate per ASTM B488, Type II, Code C, Class 1.25, over Nickel plate per SAE AMS-QQ-N-290, Class 1.

APPLICABLE Amphenol CDI DOCUMENTS

WORK STANDARD	PROD INSTRUC	ASSY INSTRUC
NA	NA	NA
-		

TOLERANCES AND NOTES
EXCEPT AS NOTED
DIMENSIONS ARE IN INCHES.
LINEAR .XX ±.015 .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 AFTER PLATING.
7. CHAMFER ALL THREADS 45°.
8. THREADS PER H-28
9. REMOVE FRAYED EDGES ON TEFLON.
10. REMOVE ALL BURRS.

-			-	-
MATERIAL			SPECIFICATION	PROCUREMENT

APPROVAL	INITIALS	DATE
DRAWN BY	ATV	02.03.02
CHECKED BY	-	-
TEST ENGR	-	-
QUALITY	-	-
DESIGN ENG	HN	02.15.11
MFG. ENGR	-	-
ECO APPRV	DNg	07.09.25

Amphenol CDI
12900 Alondra Blvd.
Cerritos, CA 90703

TITLE: SMA MALE TO SMA MALE RADIUS R/A, ADAPTER

SCALE	SUB-DIRECTORY/	SHEET
8:1	_OUTLINE\	1 OF 1

SIZE	CAGE CODE	DRAWING NO.	REV.
C	30990	OL_5065	D