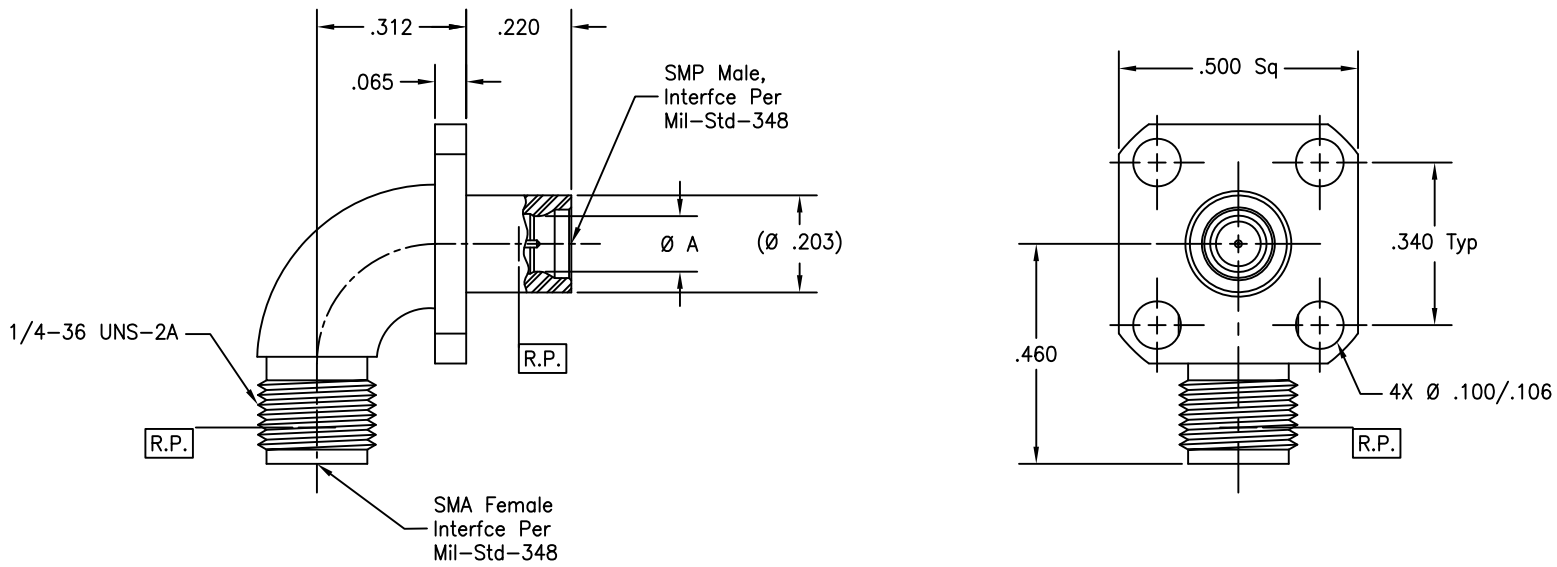
P/N	INTERFACE	Ø A
−1SF	FULL DETENT	.116±.001
−2SF	LIMITED DETENT	.120±.001
−3SF	SMOOTH BORE	.125±.001

REVISIONS			
REV	DESCRIPTION	DATE	BY
C	ECO 11680	05.23.00	IMG
D	ECO 34599 (ADD SPEC DATA)	02.21.19	DKN
E	ECO 202420 (ADD NEW NAME)	12.02.24	DKN



MATERIAL(S):

Body (SMP):
303 sst per ASTM A 582.
Body (SMA):
304L per SAE AMS 5511.
Center Conductor(s):
BeCu alloy per ASTM B 196.
Insulator:
PTFE per ASTM D 1710.

ELECTRICAL:

Impedance: 50 Ohms nominal.
Frequency Range: DC to 18 GHz.
VSWR: 1.30:1 max to 18 GHz.
Insertion Loss: 0.15 dB max to 18 GHz.
Working Voltage: 600 Vrms max @ sea level.
DWV: 500 Vrms min @ sea level.
125 Vrms @ 70,000 ft.
R.F. HiPot Voltage: 325 Vrms min @ 5MHz.
Corona Level: 190 Vrms @ 70,000 ft.
Insulation Resistance: 5,000 MegOhms min.
Contact Resistance:
Center Contact: 6.0 Milliohm max.
Outer Contact: 12.0 Milliohm max.
R.F. Leakage: −(80 − fGHz) dB min.

MECHANICAL:

Mating Characteristics:
Interfaces per Mil−Std−348.
Force To Engage & Disengage For SMA:
Torque: 2 inch−pound max.
Longitudinal Force: NA.
Force To Engage & Disengage For SMP:
Force To Engage:
Full Detent: 15 lbs maximum.
Limited Detent: 10 lbs maximum.
Smooth Bore: 2 lbs maximum.
Force To Disengage:
Full Detent: 5 lbs minimum.
Limited Detent: 2 lbs minimum.
Smooth Bore: 0.5 lbs minimum.
Connector Durability:
SMA: 500 cycles min at 12 cycles/sec max.
SMP: Depend on Detent
Center Contact Captivation:
SMA: 6 lbs minimum axial.

ENVIRONMENTAL:

Temperature Range: −65°C to +165°C.
Thermal Shock:
Mil−Std−202, Method 107, Test Cond. B, except high temperature to be +165°C.
Moisture Resistance:
Mil−Std−202, Method 106, except step 7b shall be omitted. Insulation resistance at least 200 MegOhms within 5 minutes after removal from humidity.
Corrosion:
Mil−Std−202, Method 101, Test Cond. B.
Vibration:
Mil−Std−202, Method 204, Test Cond. D.
Shock:
Mil−Std−202, Method 213, Test Cond. I.

FINISH(ES):

Body (SMP & SMA):
Passivate per ASTM A 967.
Center Conductor(s):
Gold plate per ASTM B−488, Type II, Code C, Class 1.25, .000050 thick min., over nickel under plate per SAE AMS−QQ−N−290, class 1, .000050 thick min.

APPLICABLE Amphenol CDI DOCUMENTS

WORK STD	PROD INST	ASSY INST
NA	NA	NA

TOLERANCES AND NOTES EXCEPT AS NOTED

INTERPRET DRAWING PER ASME Y14.5−2018

DIMENSIONS ARE IN INCHES:
LINEAR .XX ±.015 .XXX ±.005 ANGULAR ± 1/2°
FRACTION ± 1/32

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			SPECIFICATION	PROCUREMENT
–			–	–

APPROVAL INITIALS		DATE
DRAWN BY	BRD	02/16/96
CHECKED BY		
TEST ENGG		
QUALITY		
DESIGN ENGG	MP	05.24.00
MFG ENGG		
ECO APPRV	DNg	12.02.24

Amphenol CDI
12900 Alondra Blvd.
Cerritos, CA 90703

TITLE: SMP MALE TO SMA FEMALE RADIUS R/A 4 HOLE FLANGE MOUNT ADAPTER

SCALE	DIRECTORY\SUB−DIRECTORY	SHEET
5:1	_OUTLINE\	1 OF 1

SIZE	CAGE CODE	DRAWING NO.	REV.
C	30990	P904	E

ENG−DWG REV. H