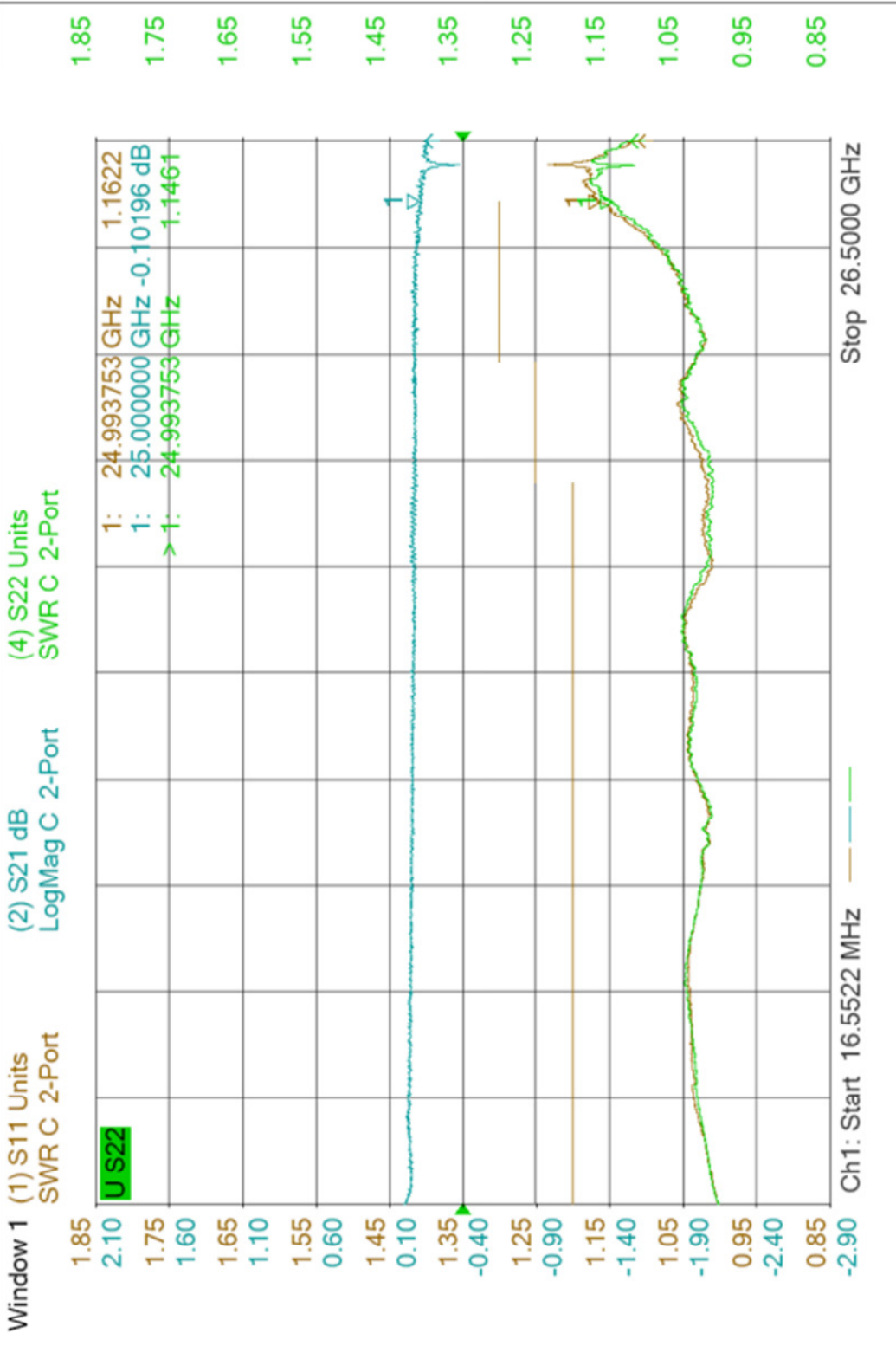


07-Nov-2007 13:52:58

Agilent Technologies



ASTROLAB TEST REPORT
29212-1
S/O 1375210

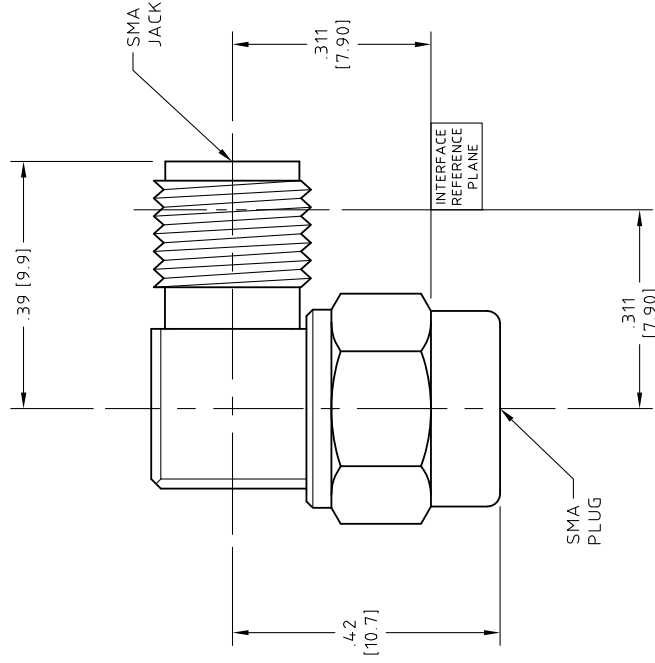
Trace Attributes			
WindowID	Trace	Channel	Correction
1	S11	1	C 2-Port
2	S21	1	C 2-Port
4	S22	1	C 2-Port

Marker	Position	Response
1	24993.753 MHz	1.1633
2	25000 MHz	-0.10771 dB
3	24993.753 MHz	1.1465

CONTROL DRAWING

29212-1

N



NOTES:

- DESCRIPTION
ADAPTOR, SMA PLUG TO SMA JACK, 90° .
- MATERIALS AND FINISHES
BODY AND NUT
STEEL, CORROSION RESISTANT PER ASTM A-582,
PASSIVATED PER SAE-AMS-2700.
NO DICHROMATE SOLUTIONS USED.
AND/OR
NICKEL PLATED, .000100 IN (2.54 µM) MIN. THK
PER SAE-AMS-C-26074, OR ASTM B-733.
CENTER CONDUCTOR,
BERYLLIUM COPPER ALLOY PER ASTM B-196,
UNS No. C17300, TEMPER TD04(H).
GOLD PLATED, .000050 IN (1.27 µM) MIN. THK
PER ASTM B-488, CODE C, TYPE II, CLASS 127
OVER
NICKEL PLATE, .000050 IN (1.27 µM) MIN. THK
PER SAE-AMS-QQ-N-290, TYPE 1.
DIELECTRIC
POLY TETRAFLUOROETHYLENE (PTFE) PER ASTM D-1710,
OR ASTM D-4894, TYPE I, GRADE 1.
RETAINING RING,
BERYLLIUM COPPER, PER ASTM B-197 OR B-441,
UNS No. C17200 TEMPER TD04(H)
GASKET,
SILICONE RUBBER PER GSA CID A-A-59588-2B
AND SAE-AMS-3304.
- ELECTRICAL CHARACTERISTICS:
IMPEDANCE
50.0 Ohms NOMINAL.
FREQUENCY
25.0 GHz MAX.
INSERTION LOSS
BELOW 210 GHz, 0.20 dB
BELOW 25.0 GHz, 0.30 dB
VSWR
BELOW 21.0 GHz, 1.15 : 1 MAX.
BELOW 25.0 GHz, 1.27 : 1 MAX.
- SMA INTERFACE MEETS MIL-STD-348.
- OPERATING TEMPERATURE RANGE,
-55° C TO +125° C.

NAME		DATE	PREP.		M. KEATING		12/05/90		
ELEC.		MECH.		Q.C.		TITLE		ADAPTOR, SMA PLUG TO SMA JACK, 90°	
FRACTIONS		± 1/16		X		± .030		XX	
ANGLES		± .005		XXX		± 1°		DO NOT SCALE DRAWING	
COMPANY LOGO UPDATE:		DESCRIPTION ADDED:		DATE		BY		APPROVED	
N		01/11/13		GS		BY		APPROVED	
REV.		DESCRIPTION		DATE		BY		APPROVED	
N		29212-1		16301		4:1		16301	
REV		DWG NO.		29212-1		N		REV	

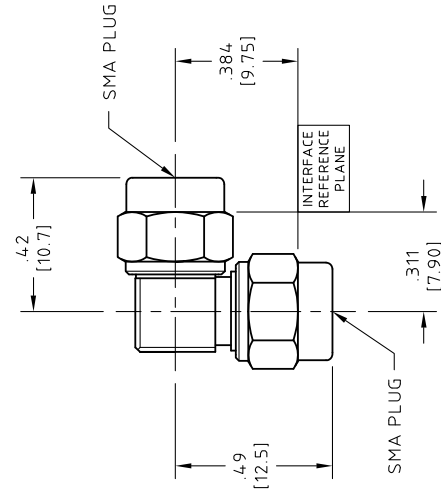


THIS DRAWING CONTAINS PATENTABLE AND PROPRIETARY INFORMATION. REPRODUCTION WITHOUT THE WRITTEN PERMISSION OF HUBER + SUHNER ASTROLAB.

CONTROL DRAWING

29212-2

H



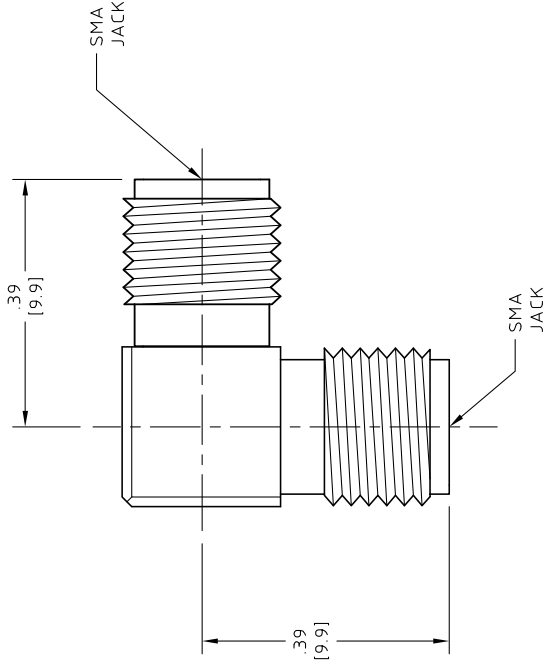
NOTES:

- DESCRIPTION
ADAPTOR, SMA PLUG TO SMA PLUG, 90°
- MATERIALS AND FINISHES
BODY AND NUTS:
STEEL, CORROSION RESISTANT PER ASTM A-582,
UNS No. S30300, COND. A, NON MAGNETIC,
PASSIVATED PER SAE-AMS-2700 OR ASTM A-967.
NO DICHROMATE SOLUTIONS USED.
OR
NICKEL PLATED, .000100 IN MIN. THK. (2.54 MICRO METERS)
PER SAE-AMS-C-26074 OR ASTM B-733.
CENTER CONDUCTOR
BERYLLIUM COPPER ALLOY PER ASTM B-196,
UNS No. C17300, TEMPER TD04(H).
GOLD PLATED .000050 IN MIN. THK. (1.27 MICRO METERS)
PER ASTM B-488, CODE C, TYPE II
OVER
NICKEL PLATE, .000050 IN MIN. THK. PER SAE-AMS-QQ-N-290,
OR ASTM B-689 TYPE 1.
DIELECTRIC
POLYTETRAFLUOROETHYLENE (PTFE) PER ASTM D-1710,
OR ASTM D-4894, TYPE I, GRADE 1.
RETAINING RING
BERYLLIUM COPPER, PER ASTM B-197 OR B-441,
UNS No. C17200 TEMPER TD04(H).
GASKET
SILICONE RUBBER PER GSA CID A-A-59588-2B AND SAE-AMS-3304.
- ELECTRICAL CHARACTERISTICS:
IMPEDANCE
50.0 Ohms NOMINAL.
FREQUENCY
25.0 GHz MAX.
INSERTION LOSS
0.40 dB MAX.
VSWR
1.20 : 1 MAX. FROM DC TO 18.0 GHz.
1.25 : 1 MAX. FROM 18.0 TO 21.0 GHz.
1.35 : 1 MAX. FROM 21.0 TO 25.0 GHz.
- INTERFACE MEETS MIL-STD-348.
- OPERATING TEMPERATURE RANGE
-55° C TO +125° C

NAME		DATE	HUBER+SUHNER	
PREP. M. KEATING		12/05/90	Astrolab	
ELEC.			THIS DRAWING CONTAINS PATENTABLE AND PROPRIETARY INFORMATION. REPRODUCTION WITHOUT THE WRITTEN PERMISSION OF HUBER + SUHNER ASTROLAB.	
MECH.				
Q.C.				
TITLE		ADAPTOR, SMA PLUG TO SMA PLUG, 90°		
FRACTIONS ± 1/16		THIS DRAWING IS TO BE IN ACCORD WITH U.S. FEDERAL STANDARDS FOR FEDERAL SERVICES 1950 SUPPL. TO HANDBOOK H 28.		
X ± .030		SCALE	2:1	DWG NO. 29212-2
XX ± .015		CODE IDENT.	16301	REV H
XXX ± .005				
ANGLES ± 1°				
DO NOT SCALE DRAWING				
COMPANY LOGO UPDATE	DESCRIPTION ADDED	DATE	BY	APPROVED
H	GS	01/11/13	GS	
REV.	DESCRIPTION	DATE	BY	APPROVED

29212-3

E



NOTES:

1. DESCRIPTION
ADAPTOR, SMA JACK TO SMA JACK, 90°.
2. BODY AND NUT.
STEEL, CORROSION RESISTANT PER ASTM A-562,
UNS No. S30300, COND. A, NON MAGNETIC,
PASSIVATED PER SAE-AMS-2700 OR ASTM A-967.
NO DICHROMATE SOLUTIONS USED.
OR
NICKEL PLATED .000100 IN MIN. THK. (2.54 MICRO METERS)
PER SAE-AMS-C-26074 OR ASTM B-733.
CENTER CONDUCTOR,
BERYLLIUM COPPER ALLOY PER ASTM B-196,
UNS No. C17300, TEMPER TD04(H).
GOLD PLATED .000050 IN MIN. THK. (1.27 MICRO METERS)
PER ASTM B-488, CODE C, TYPE II,
OVER
NICKEL PLATE, .000050 IN MIN. THK. PER SAE-AMS-QQ-N-290,
OR ASTM B-689 TYPE 1.
DIELECTRIC,
POLYTETRAFLUOROETHYLENE (PTFE) PER ASTM D-1710,
OR ASTM D-4894, TYPE I, GRADE 1.
3. ELECTRICAL CHARACTERISTICS:
IMPEDANCE
50.0 Ohms NOMINAL.
FREQUENCY
25.0 GHz MAX.
INSERTION LOSS
0.40 dB MAX.
VSWR
1.20 : 1 MAX. FROM DC TO 18.0 GHz.
1.25 : 1 MAX. FROM 18.0 TO 21.0 GHz.
1.35 : 1 MAX. FROM 21.0 TO 25.0 GHz.
4. INTERFACE MEETS MIL-STD-348.
5. OPERATING TEMPERATURE RANGE
-55° C TO +125° C

CONTROL DRAWING

NAME M. KEATING		DATE 12/05/90
PREP.		
ELEC.		
MECH.		
Q.C.		
TITLE ADAPTOR, SMA JACK TO SMA JACK		
UNLESS OTHERWISE SPECIFIED CORNERS AND FILLETS .005 TYPICAL UNLESS OTHERWISE SPECIFIED FINISH PER MICROINCHES OR BETTER. FRACTIONS ± 1/16 X ± .030 XX ± .015 XXX ± .005 ANGLES ± 1° DO NOT SCALE DRAWING		
COMPANY LOGO UPDATE: DESCRIPTION ADDED:	01/11/13	GS
DESCRIPTION	DATE	BY APPROVED
REV.	DESCRIPTION	SCALE IDENT: DWG NO.
E		4:1 16301 29212-3
		REV E



THIS DRAWING CONTAINS PATENTABLE AND PROPRIETARY INFORMATION. REPRODUCTION WITHOUT THE WRITTEN PERMISSION OF HUBER + SUHNER ASTROLAB.