

# CONTROL DRAWING

29429-4

C

**NOTES:**

**1. DESCRIPTION,**

ASTRO-PHASE-SERIES ADAPTOR,  
SMPM MALE, FULL DETENT TO 2.9mm (SMK) JACK.  
THIS ADAPTOR IS PART OF ASTRO-PHASE-SERIES,  
A SERIES OF PHASE MATCHED ADAPTORS,  
OFFERED BY H+S Astrolab.

**2. MATERIALS AND FINISHES:**  
BODY,

STEEL, CORROSION RESISTANT PER ASTM A-582,  
UNS No. S30300, COND. A, NON MAGNETIC,  
AND  
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 1.27  
OVER  
NICKEL PLATE, .000050 IN (1.27 μM) MIN. THK.  
PER SAE-AMS-QQ-N-290, CLASS 1.

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 1.27  
OVER  
NICKEL PLATE, .000050 IN (1.27 μM) MIN. THK.  
PER SAE-AMS-QQ-N-290, CLASS 1.

DIELECTRIC,

POLYTETRAFLUOROETHYLENE (PTFE) PER ASTM D-1710,  
OR ASTM D-4894, TYPE I, GRADE 1, CLASS A,

AND

POLYETHERIMIDE RESIN (PEI) (G.E. ULTEM®) PER ASTM D-5205

OUTGASSING,

ASSEMBLY MEETS OR EXCEEDS NASA LOW OUTGASSING REQUIREMENTS.

**3. ELECTRICAL CHARACTERISTICS:**

IMPEDANCE

50.0 Ohms NOMINAL.

FREQUENCY

40.0 GHz MAX.

INSERTION LOSS

0.40 dB MAX.

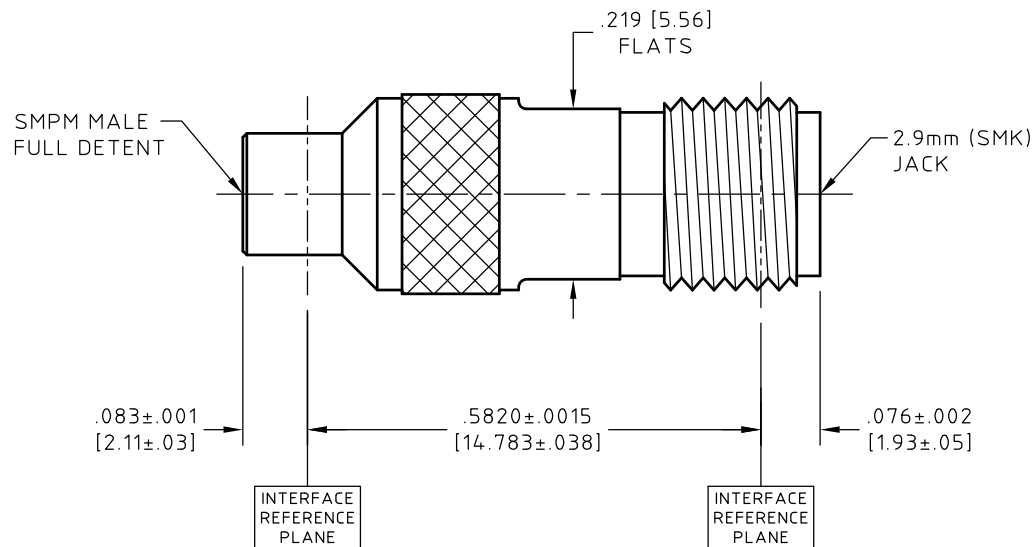
VSWR

1.35 : 1 MAX.

**4. INTERFACES MEET MIL-STD-348.**

**5. OPERATING TEMPERATURE RANGE:**

-55° C TO +125° C.



NAME	DATE
PREP. AP	04/10/03
ELEC. RF	05/15/03
MECH. GSG	05/15/03
Q.C.	

**HUBER+SUHNER**  
**Astrolab**

THIS DRAWING CONTAINS PATENTABLE AND PROPRIETARY INFORMATION. THE DESIGN CANNOT BE USED WITHOUT WRITTEN PERMISSION OF HUBER + SUHNER ASTROLAB.

UNLESS OTHERWISE SPECIFIED  
CONCENTRICITY .004 T.I.R.  
CORNERS AND FILLETS .005  
MAX. RADIUS OR CHAMFER.  
SURFACE FINISH 63 RMS  
MICROINCHES OR BETTER.

FRACTIONS	± 1/16
X	± .030
XX	± .015
XXX	± .005
ANGLES	± 1°
DO NOT SCALE DRAWING	

TITLE		SCALE	CODE IDENT.	DWG NO.	REV
ADAPTOR, SMPM MALE, FULL DETENT TO 2.9mm (SMK) JACK		4:1	16301	29429-4	C
THDS. TO BE IN ACCORD WITH U.S. DEPT. OF COMM. SCREW THD. STDS. FOR FEDERAL SERVICES 1950 SUPL. TO HANDBOOK H 28.					

REV.	DESCRIPTION	DATE	BY	APPROVED
C	ECN No. 15377	02/28/13	EF	