

**CONNECTOR PARTS**

CENTER CONTACT  
 OUTER CONTACT PCB SIDE  
 OUTER CONTACT RPC-1.85 SIDE  
 DIELECTRIC

**MATERIAL**

CuBe  
 CuBe or equiv.  
 CuBe or equiv.  
 PEEK / PTFE

**PLATING**

gold plated  
 gold plated  
 gold plated

**ELECTRICAL DATA**

IMPEDANCE 50Ω  
 FREQUENCY DC TO 40 GHz  
 RETURN LOSS ≥ 21 dB, DC TO 26.5 GHz  
 ≥ 19 dB, 26.5 TO 40 GHz

INSERTION LOSS ≤ 0.04 X SQR RT f(GHz) dB  
 INSULATION RESISTANCE ≥ 5 GΩ  
 TEST VOLTAGE 750 V rms  
 WORKING VOLTAGE 250 V rms

**MECHANICAL DATA**

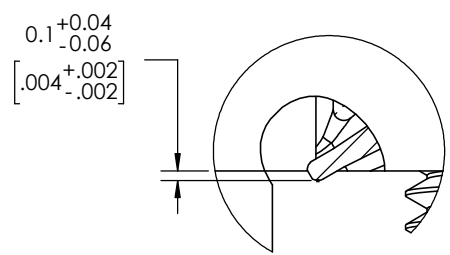
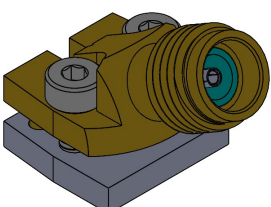
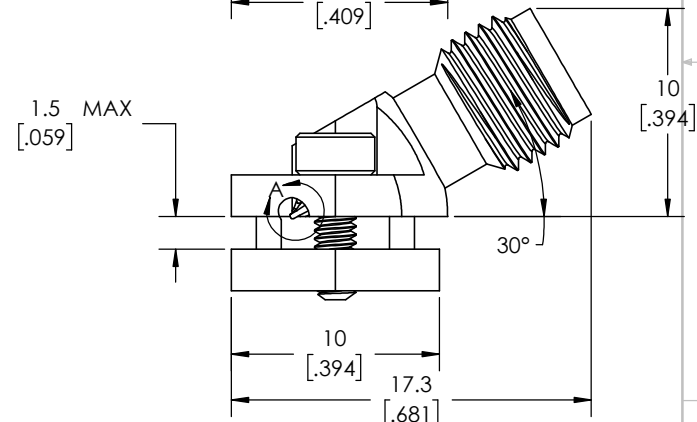
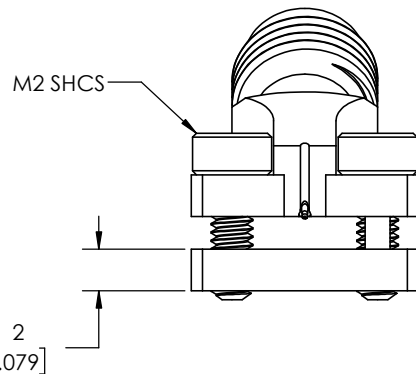
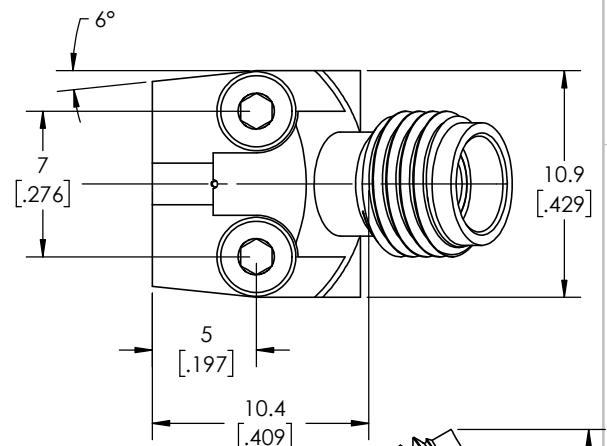
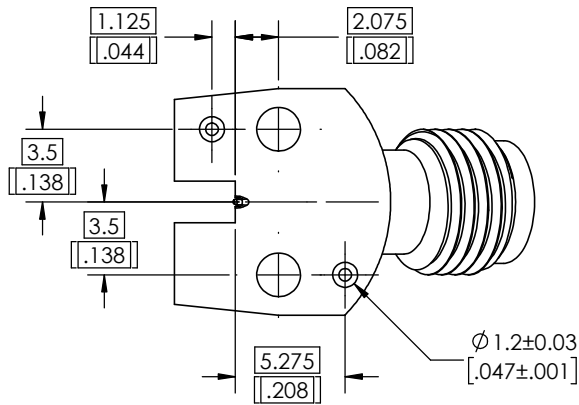
MATING CYCLES PCB SIDE ≥ 300  
 MATING CYCLES RPC-1.85 SIDE ≥ 500  
 COUPLING TEST RPC-1.85 1.65 Nm  
 RECOMMENDED TORQUE ALLEN SCREW 1.5 0.20 Nm TO 0.30 Nm  
 PCB THICKNESS MAX. 1.5 mm TYPICAL; DIMENSION EXPANDABLE WITH LONGER SCREWS

**ENVIRONMENTAL DATA**

TEMPERATURE RANGE -40° C TO +85° C  
 THERMAL SHOCK IEC 61169-1, SUBCLAUSE 9.4.4  
 CORROSION IEC 61169-1, SUBCLAUSE 9.4.6  
 VIBRATION IEC 61169-1, SUBCLAUSE 9.3.3  
 SHOCK IEC 61169-1, SUBCLAUSE 9.3.14  
 MOISTURE RESISTANCE IEC 61169-1, SUBCLAUSE 9.4.3  
 MAX SOLDERING TEMP N/A (CONNECTOR IS ONLY SCREWED DOWN)  
 RoHS COMPLIANT

FOR QUESTIONS PLEASE CONTACT SALES@AMPHENOLCDI.COM

REVISION HISTORY					
ECO	REV.	DESCRIPTION	DRAWN BY	APPROVAL	DATE
	01	REVISED TOLERANCE TO BE +0.04 / -0.06	James		6/7/2021
	02	CHANGE P/N, WAS TMB-A9F2-3L1	Evan		09/12/2022
	03	UPDATE PCB DIMENSION ACCORD 1.85 CONFIG	MATTHEW		04/03/2024



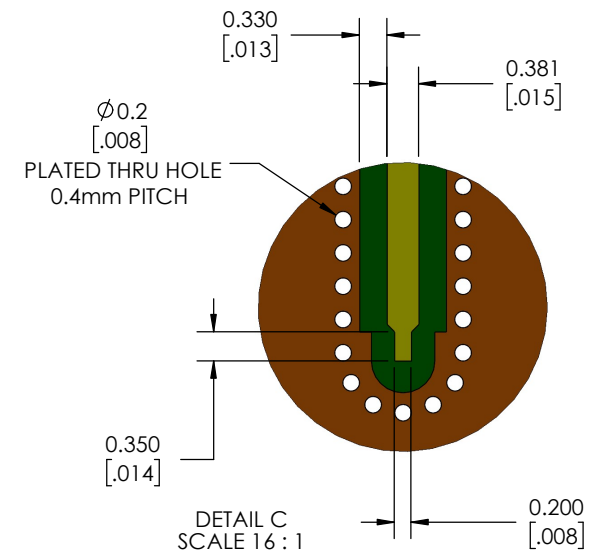
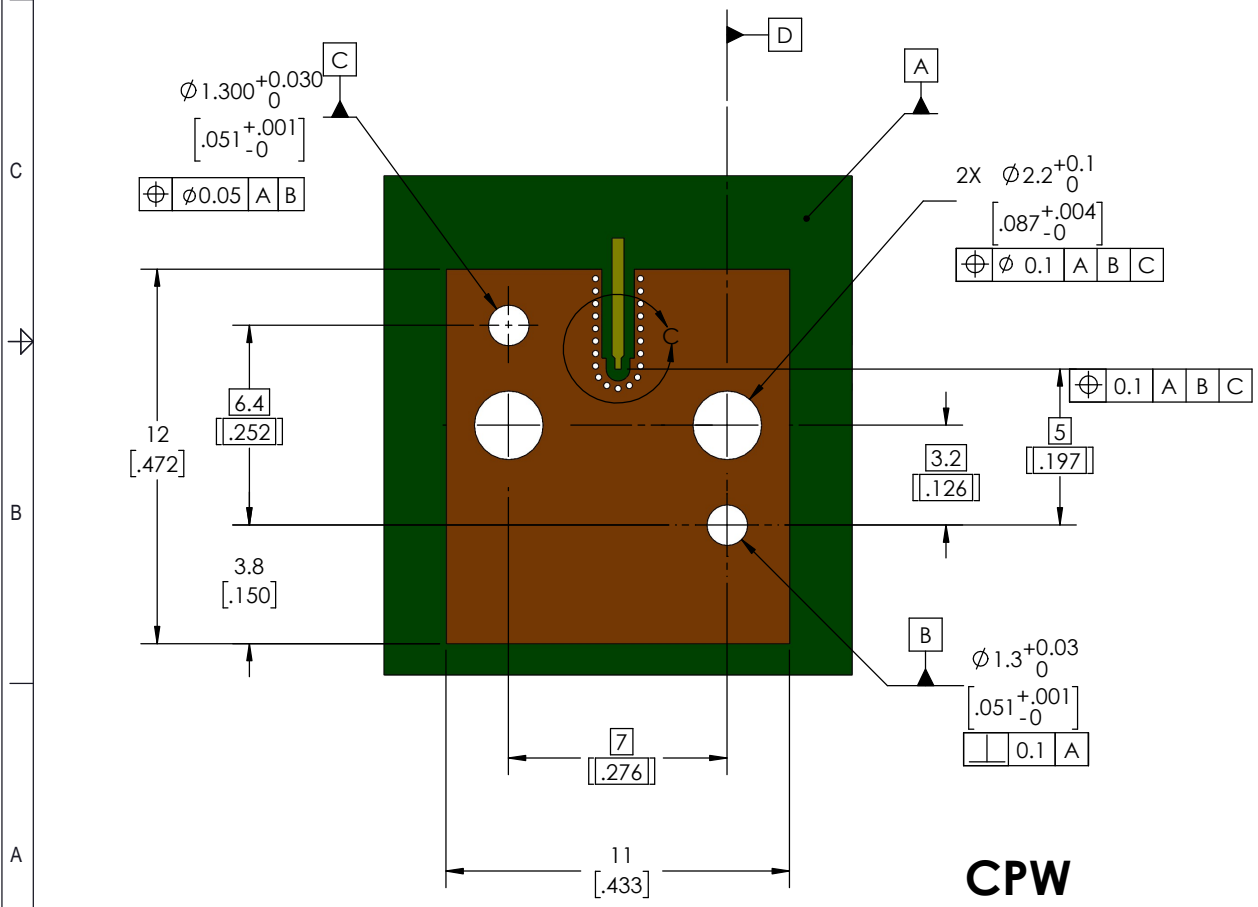
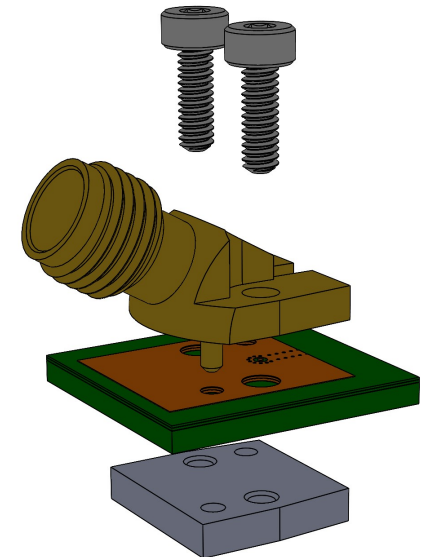
DETAIL A  
 SCALE 16 : 1

DIMENSIONS ARE IN MILLIMETERS [INCHES] ± TOLERANCES UNLESS OTHERWISE NOTED					THIRD ANGLE PROJECTION		Amphenol				
.X	.XX	.XXX	.XXXX	ANGLE			TITLE 2.92 ANGLED CONNECTOR, JACK				
0.3mm [.012"]	0.15mm [.006"]	0.050mm [.002"]	0.010mm [.0004"]	0.5	DESIGN ENGR: R BEDIENT	11/17/2020					
					DESIGNED BY: R BEDIENT	11/17/2020					
NEXT ASSY.					USED ON		PRODUCT:	SIZE B	CAGE CODE 7M294	PART NUMBER TMB-A9F2-3L1	REV 03
APPLICATION							QUALITY:	SCALE: 4:1		DO NOT SCALE DRAWING	
					MFG:				1 OF 3		

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THERE IS A WIDE VARIETY OF TRANSMISSIONLINE TOPOLOGIES AND PCB-PARAMETERS LIKE PERMITTIVITY, SUBSTRATE THICKNESS AND ALSO THE BOARD-STACKUP APPLIED BY CUSTOMERS. THESE PARAMETERS HAVE A STRONG IMPACT ON THE HIGH FREQUENCY PERFORMANCE OF THE MOUNTED CONNECTOR. PLEASE NOTE, THAT THE GIVEN LAYOUT IS NOT OPTIMISED TO FIT ALL OF THE POSSIBLE BOARD CONFIGURATIONS REGARDING RF-PERFORMANCE. IN ORDER TO ASSURE OPTIMUM HIGH FREQUENCY PERFORMANCE OF THE CONNECTOR, AN RF-ANALYSIS OF THE CONNECTOR TO BOARD TRANSITION IS RECOMMENDED.



**CPW**  
**Amphenol** *CDI*

2.92 ANGLED CONNECTOR,  
 JACK

SIZE	CAGE CODE	PART NUMBER	REV
B	7M294	TMB-A9F2-3L1	03
SCALE: 6:1		PART NUMBER: TMB-A9F2-3L1	2 OF 3

