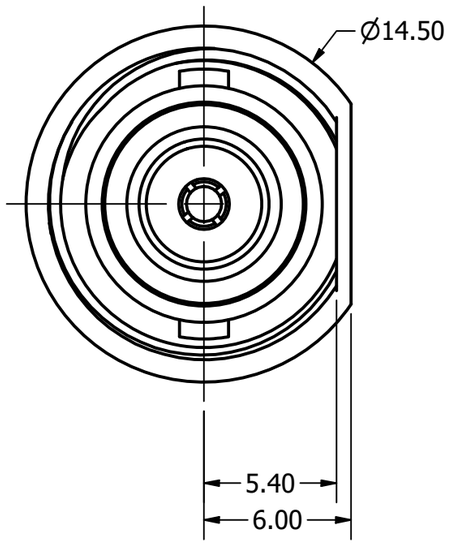
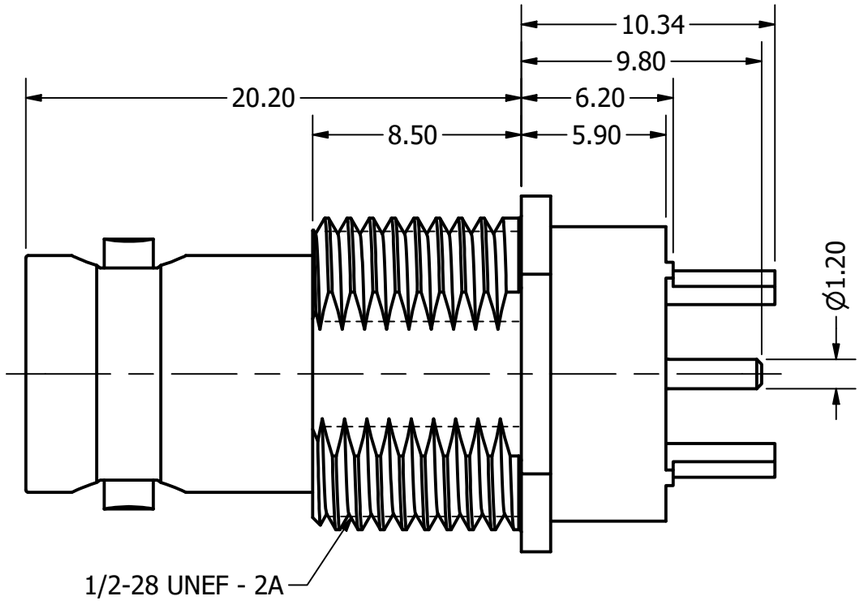
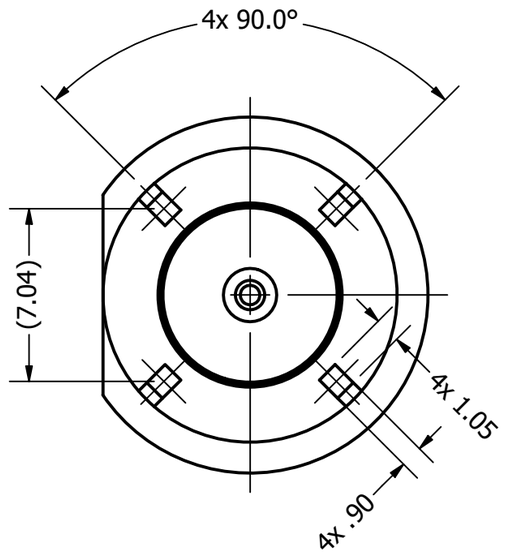
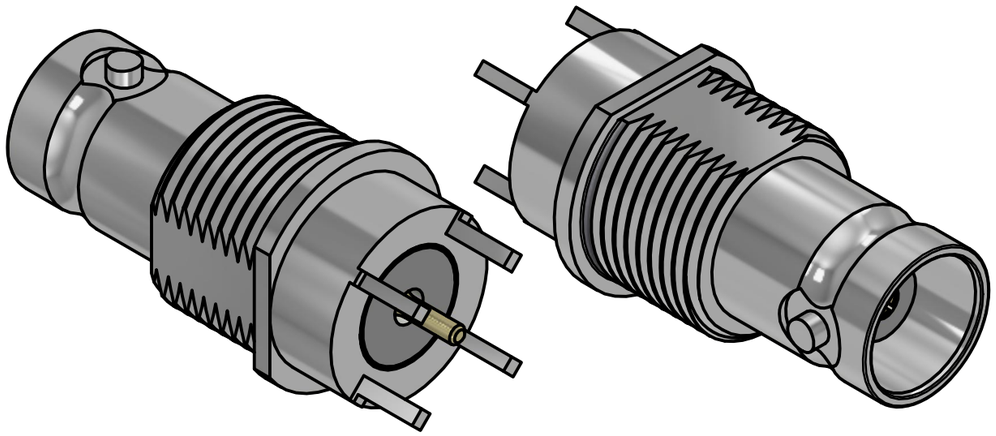
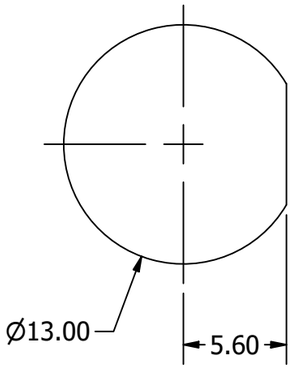




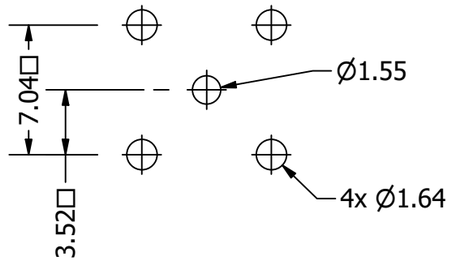




Recommended panel cutout



Recommended PCB footprint



REVISION HISTORY				
REV	DESCRIPTION	CHG REF	DATE	DESIGNER
1.0	Origin	-	28 Apr 2025	Peter Millard
1.1	Updated ICT	FB / SUPP	19 May 2025	Peter Millard
1.2	Updated ICT	FB / SUPP	17 Jun 2025	Peter Millard
1.3	Converted to final P/N	FB / SUPP	21 Jan 2026	Peter Millard

Design Right Protected	Material:	Finish:	Gen Tol ±0.10 Angular ±2°	DO NOT SCALE		
				Unit of Measure: millimeters (mm)		
Third Angle Projection	Designed by Peter Millard	Checked by	Approved by	©2024	Date 28/04/2025	A3
RoHS Compliant	CAMBRIDGE ELECTRONIC INDUSTRIES	This document and all the data contained herein is and shall remain the property of Cambridge Electronic Industries Ltd and may not be used or copied for any purpose whatsoever without the written permission of Cambridge Electronic Industries Ltd.	Description: 50Ω BNC Socket 12GHz Top Entry Bulkhead, 4.1mm Leg			
			Part No: ZBS-12-TB41-NN Cust	Issue 1.3	Sheet 1 / 2	

Source:E:\Cambridge Connectors\Live Products\Engineering Data\(B) BNC\ZBS-12-TB41-NN (NPO 3834 B)\ZBS-12-TB41-NN

Electrical:

Impedance	50Ω
Frequency range	DC ~ 12.0 GHz
Working voltage	500 VRMS
Dielectric withstanding voltage	1500 VRMS
Reflection factor (VSWR)	1.17 MAX DC ~ 6.0 GHz
	1.25 MAX DC ~ 12.0 GHz
Contact resistance	Centre contact ≤1.5 mΩ
	Outer contact ≤1.0 mΩ
Insulation resistance	≥5000 MΩ

Materials:

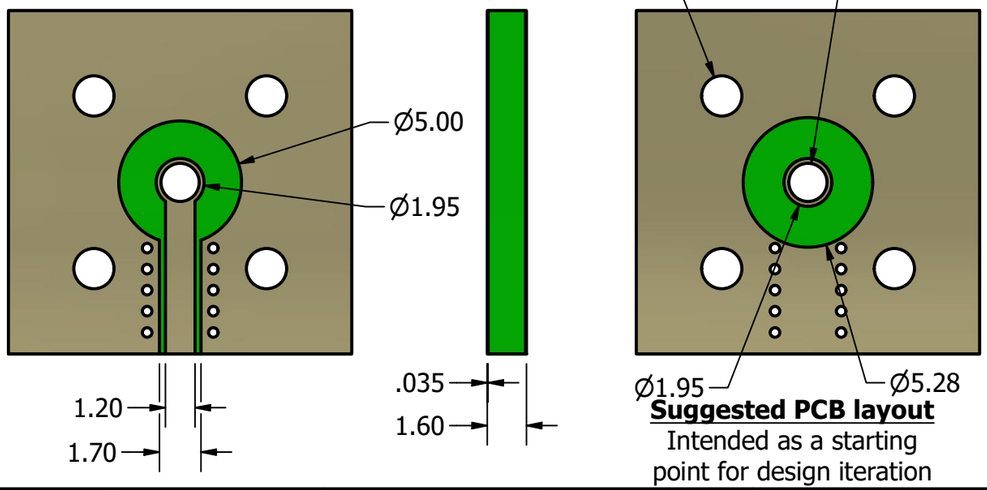
Centre contact	Phosphor Bronze / Au plated
Metal parts	Brass / Ni plated
Insulators	Polytetrafluoroethylene

Environmental:

Temp ranges	-65 ~ +85°C
Mating cycles	250
Vibration	N/A
Salt spray	N/A

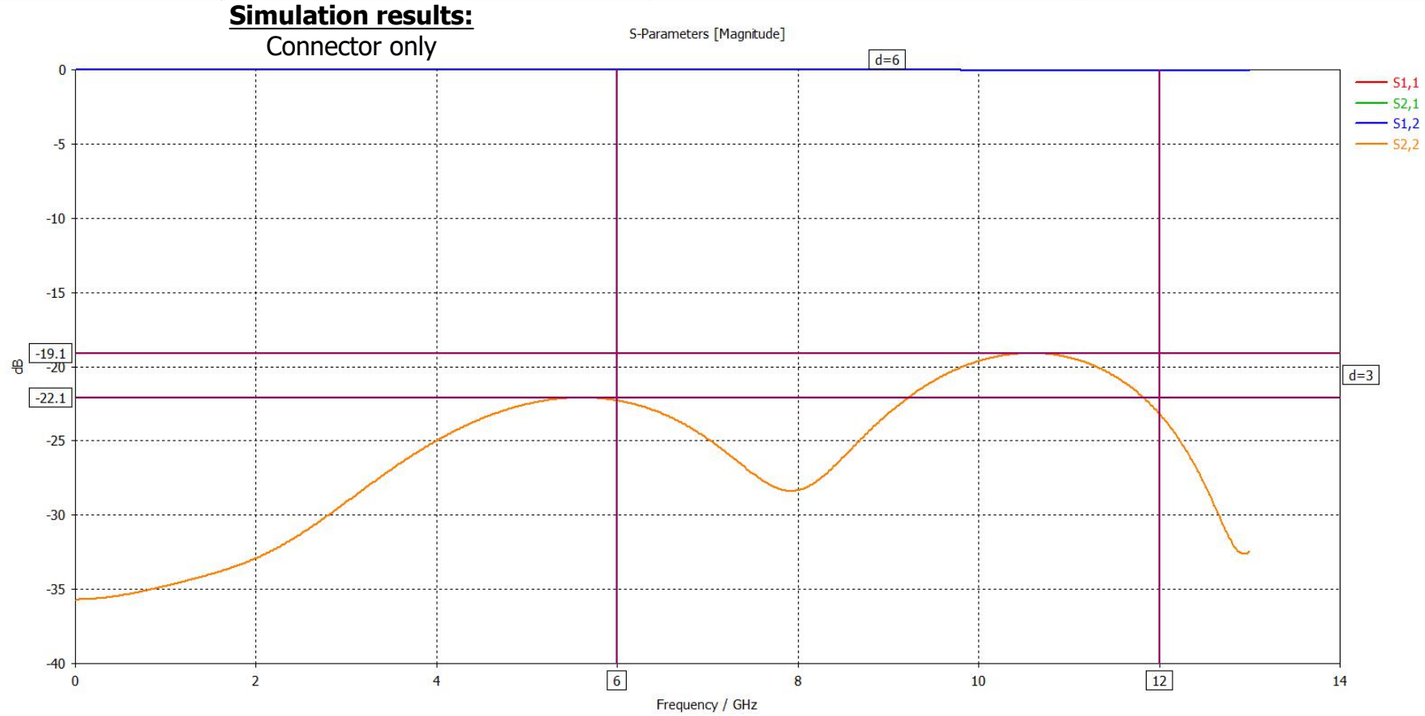
Processing:

Hand solder	Recommended / 260°C MAX 10 ~ 12 seconds dwell time
Wave solder	Recommended / 260°C MAX 10 ~ 12 seconds dwell time
Reflow solder	Not recommended

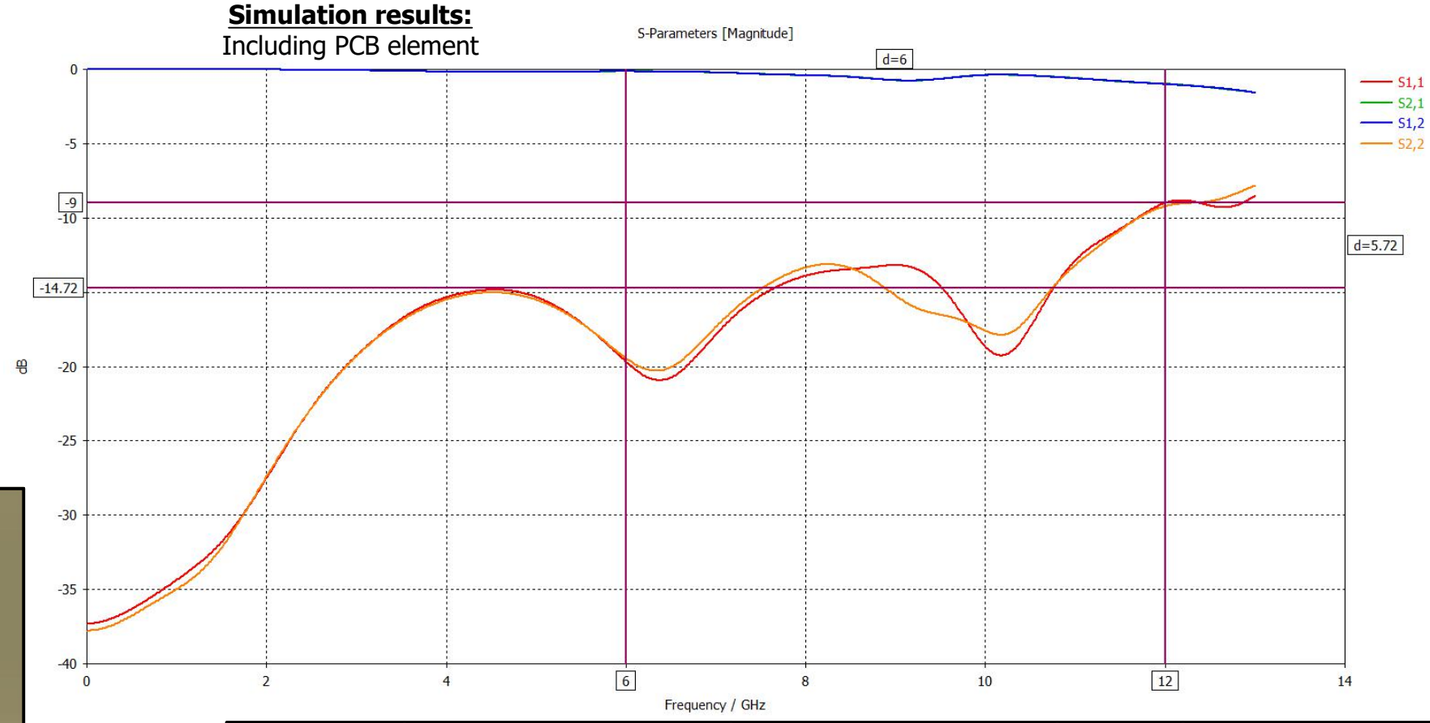


Suggested PCB layout
Intended as a starting point for design iteration

Simulation results:
Connector only



Simulation results:
Including PCB element



Design Right Protected	Material:	Finish:		Gen Tol ±0.10 Angular ±2°	DO NOT SCALE	
Third Angle Projection	Designed by Peter Millard	Checked by	Approved by	©2024	Date 28/04/2025	A3
RoHS Compliant	CAMBRIDGE ELECTRONIC INDUSTRIES	This document and all the data contained herein is and shall remain the property of Cambridge Electronic Industries Ltd and may not be used or copied for any purpose whatsoever without the written permission of Cambridge Electronic Industries Ltd.	Description: 50Ω BNC Socket 12GHz Top Entry Bulkhead, 4.1mm Leg			
			Part No: ZBS-12-TB41-NN Cust	Issue 1.3	Sheet 2 / 2	