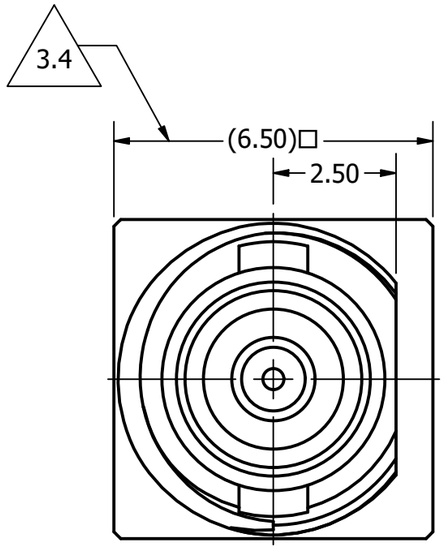
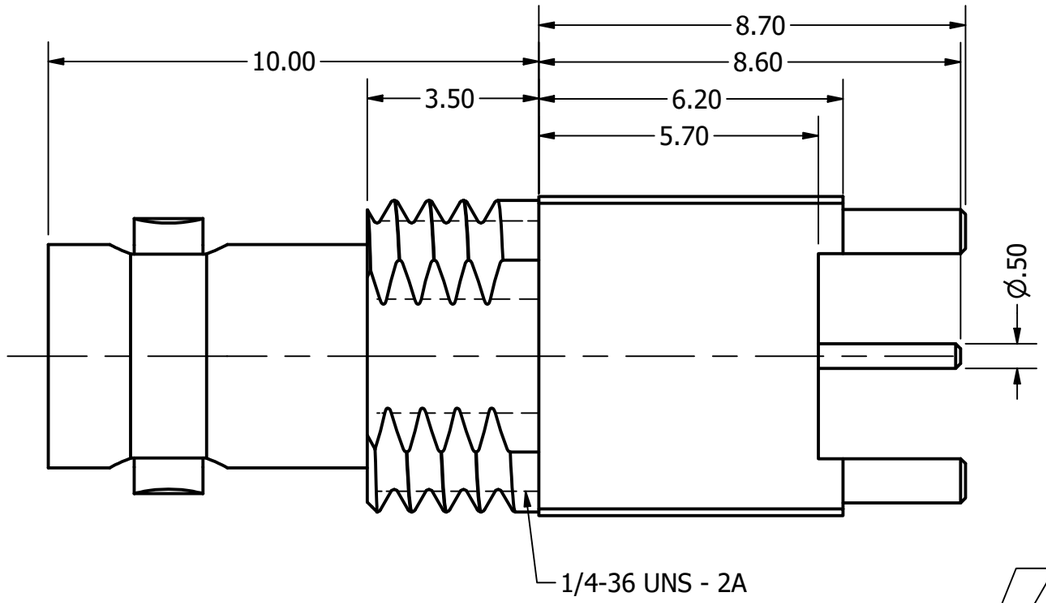
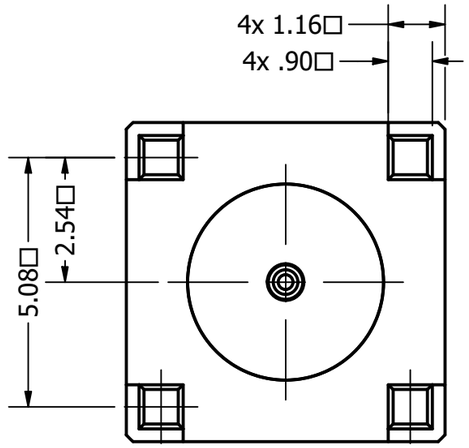
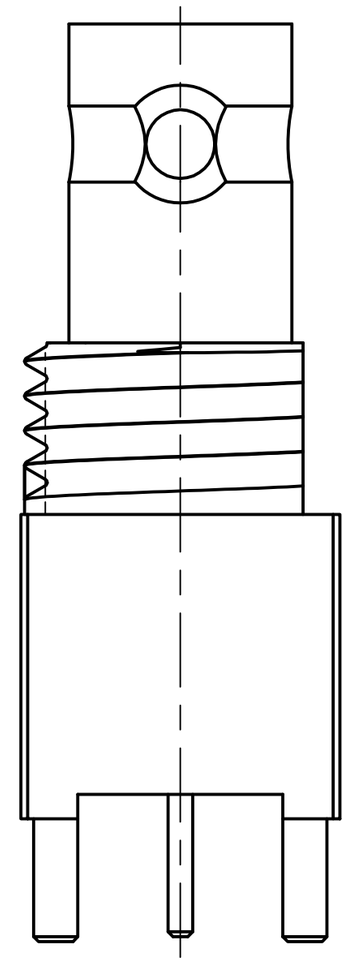
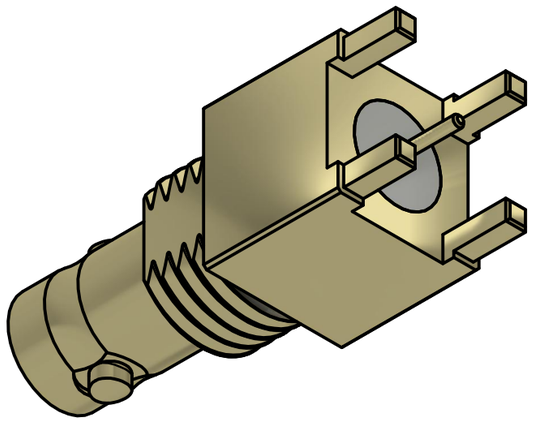
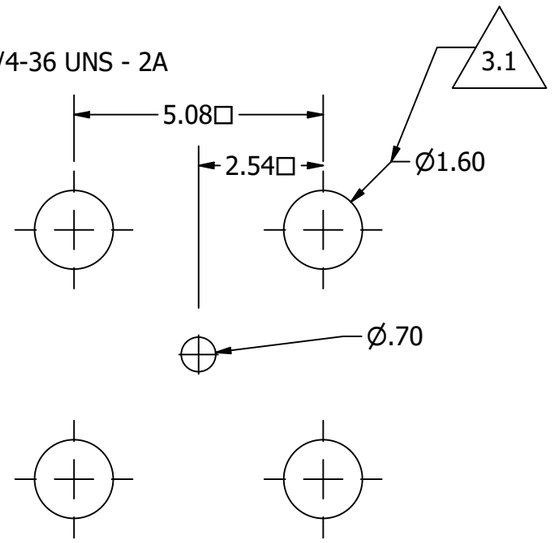




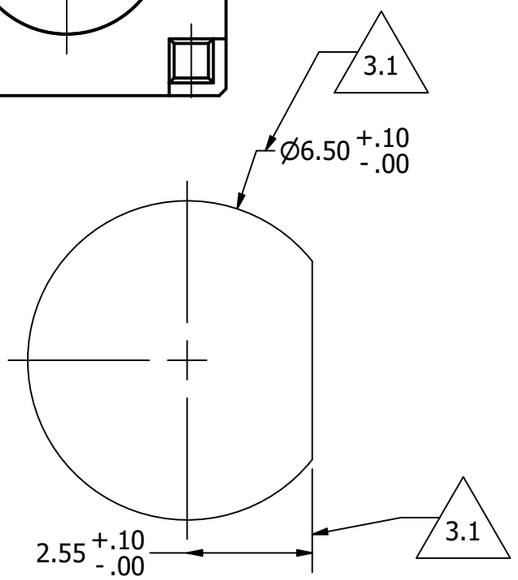








Recommended PCB footprint

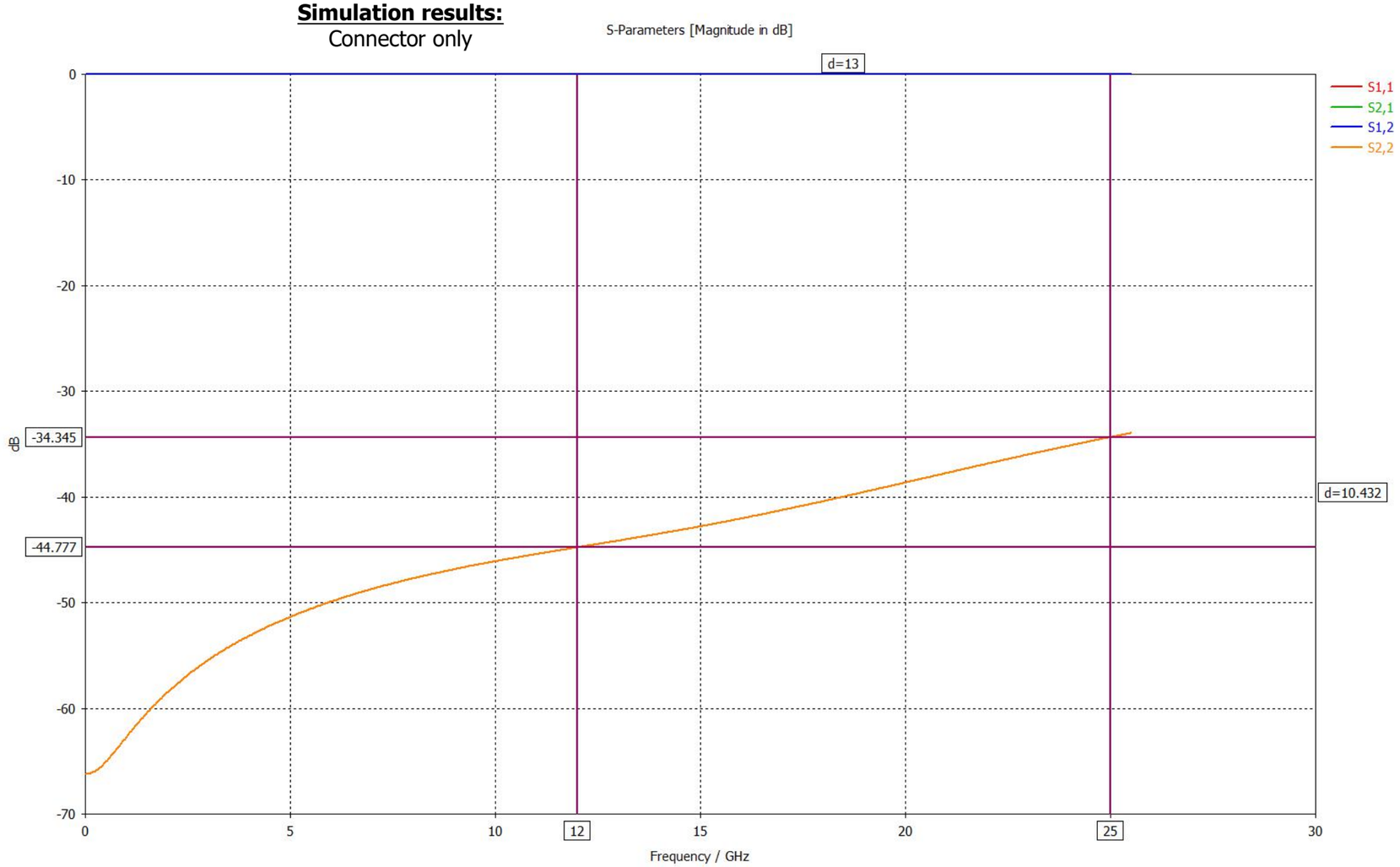


Recommended panel cutout

REVISION HISTORY			
REV	DESCRIPTION	DATE	DESIGNER
3.0	Updated P/N	31 Jul 2024	Peter Millard
3.1	Updated Body Chamfer, PCB Footprint & Panel Cutout	16 Jan 2025	Peter Millard
3.2	Updated panel note	17 Jul 2025	Peter Millard
3.3	Updated body TOL	21 Aug 2025	Peter Millard
3.4	Updated body dimensions	08 Sep 2025	Peter Millard
3.5	Added Thread Notes	17/09/2025	Martin Smith

Design Right Protected	Material:	Finish:	Gen Tol ±0.10 Angular ±2°	DO NOT SCALE	
Third Angle Projection	Designed by Peter Fayers	Checked by	Approved by	©2024	Date 21 Mar 2013	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: 75Ω Micro BNC Socket 12GHz Top Entry Bulkhead, 2.5mm Leg with 6.2mm Standoff		
			Part No: XPS-12-TB25-GG Cust	Issue 3.5	Sheet 1 / 2

Simulation results:
Connector only



Electrical:

Impedance	75Ω
Frequency range	DC ~ 25.0 GHz
Working voltage	170 V_{RMS}
Dielectric withstanding voltage	>500 V_{RMS}
Reflection factor (VSWR)	1.00 MAX DC ~ 6.0 GHz
	1.01 MAX DC ~ 12.0 GHz
	1.04 MAX DC ~ 25.0 GHz
Contact resistance	Centre contact ≤5.0 mΩ
	Outer contact ≤2.5 mΩ
Insulation resistance	≥1000 MΩ

Materials:

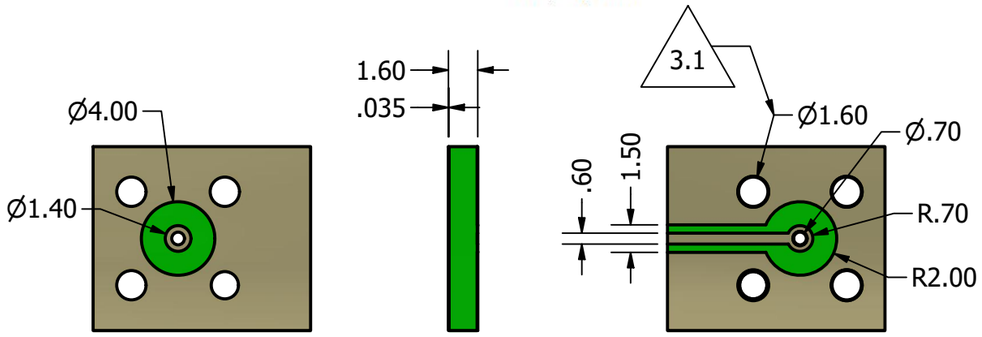
Centre contact	Beryllium Copper / Au plated
Metal parts	Brass / Au plated
Insulators	Polytetrafluoroethylene

Environmental:

Temp ranges	-65 ~ +85°C
Mating cycles	500
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

Design Right Protected	Material:	Finish:		Gen Tol ±0.10 Angular ±2°	DO NOT SCALE	
Third Angle Projection	Designed by Peter Fayers	Checked by	Approved by	©2024	Date 21 Mar 2013	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: 75Ω Micro BNC Socket 12GHz Top Entry Bulkhead, 2.5mm Leg with 6.2mm Standoff	Part No: XPS-12-TB25-GG Cust	Issue 3.5	Sheet 2 / 2