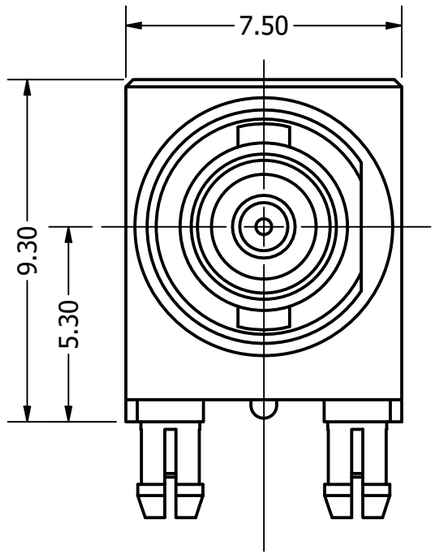
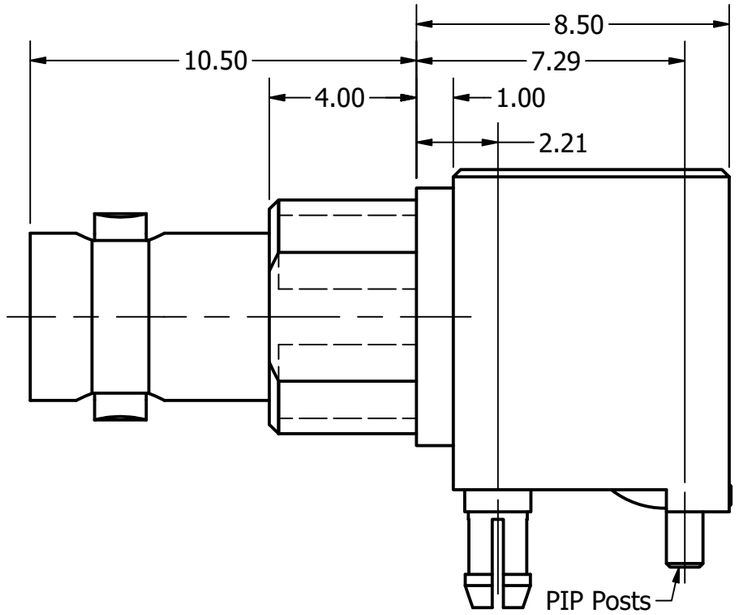
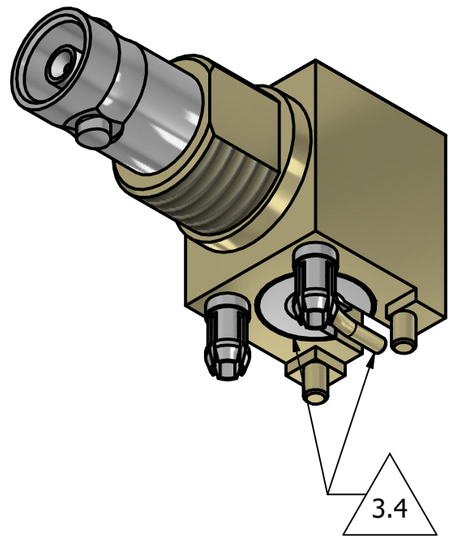
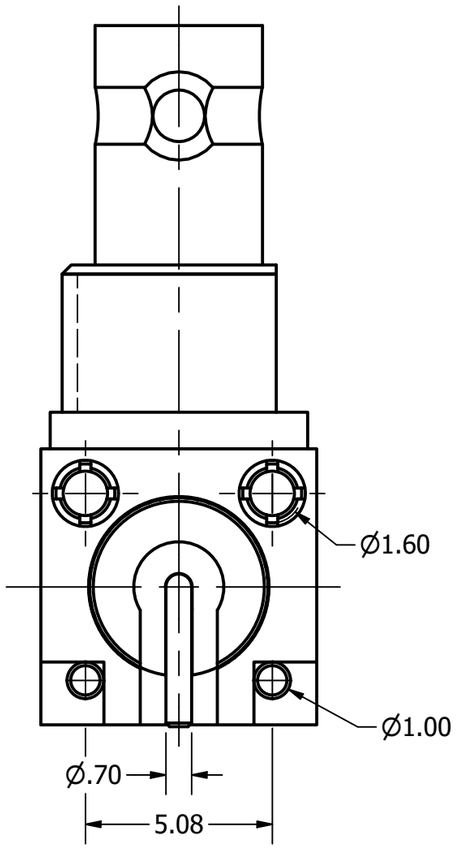
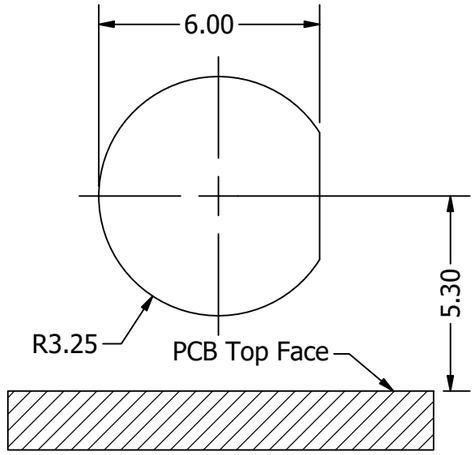










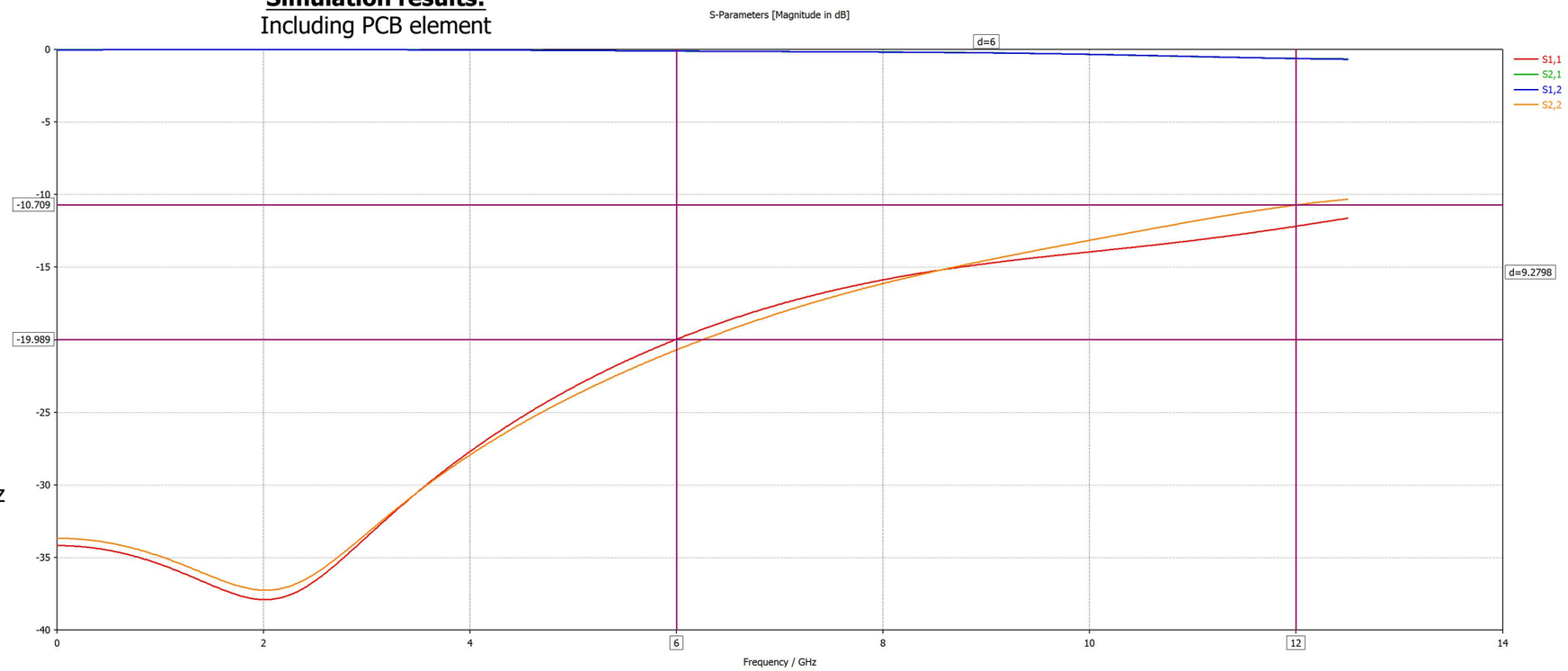
Recommended panel cutout

REVISION HISTORY				
REV	DESCRIPTION	CHG REF	DATE	DESIGNER
3.0	Updated P/N	FB / INT	08 Apr 2024	Peter Millard
3.1	Revised Contact	FB / SUPP	05 Aug 2024	Peter Millard
3.2	Updated harpoon	FB / INT	06 Aug 2024	Peter Millard
3.3	Added inspection details to assembly	FB / SUPP	25 Nov 2024	Peter Millard
3.4	Updated retention ring design, adjusted pin height	FB / SUPP	19 Dec 2024	Peter Millard

Design Right Protected	Material:	Finish:	Gen Tol ±0.10	DO NOT SCALE	
				Unit of Measure: millimeters (mm)	
Third Angle Projection	Designed by Peter Fayers	Checked by	Approved by	©2024	Date 13 Feb 2019	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 Right Angle Bulkhead,1.6mm Leg, with Harpoons for Auto Place & Reflow		
			Part No: XPS-12-RB16-GNHP Cust	Issue 3.4	Sheet 1 / 3

Simulation results:

Including PCB element



Electrical:

Impedance	75Ω
Frequency range	DC ~ 12.0 GHz
Working voltage	170 V_{RMS}
Dielectric withstanding voltage	>500 V_{RMS}
Reflection factor (VSWR)	1.23 MAX DC ~ 6.0 GHz
	1.86 MAX DC ~ 12.0 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 & Phosphor Bronze / Au & Ni plated
Insulators	Polytetrafluoroethylene

Environmental:

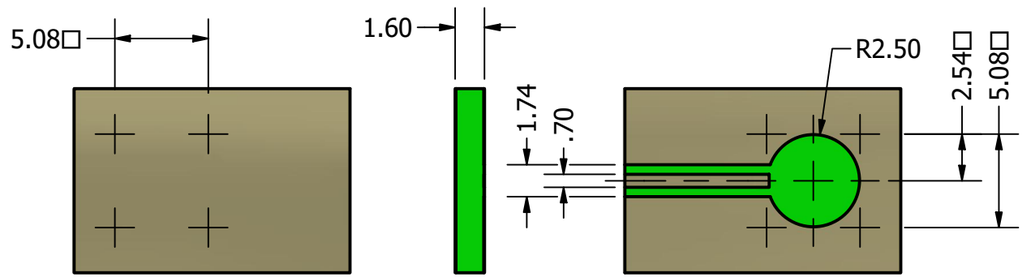
Temp ranges	-65 ~ +85°C
Mating cycles	500
Vibration	N/A
Salt spray	N/A

Processing:

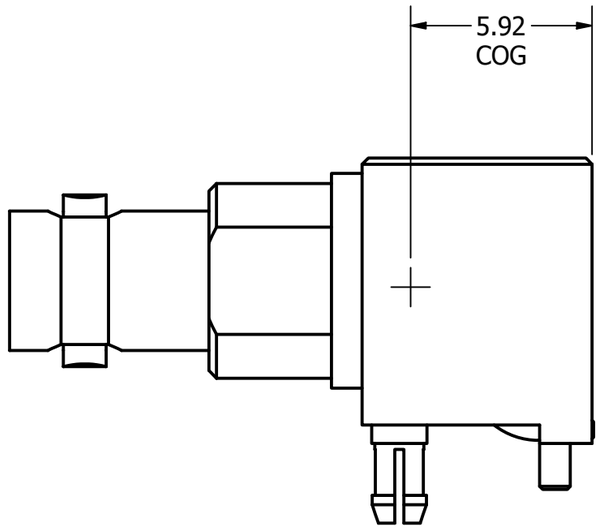
Hand solder	Recommended / 260°C MAX 10 ~ 12 seconds dwell time
Wave solder	Recommended / 260°C MAX 10 ~ 12 seconds dwell time
Reflow solder	Recommended / 245°C MAX

Suggested PCB layout

Intended as a starting point for design iteration



Design Right Protected	Material:	Finish:		Gen Tol ±0.10	DO NOT SCALE	
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			Part No: XPS-12-RB16-GNHP Cust	Issue 3.4	Sheet 2 / 3	



Pick and Place Data

PCB Insertion Force: < 8N
Component Weight (Excluding Nut): 5g

Design Right Protected	Material:	Finish:			Gen Tol ±0.10	DO NOT SCALE Unit of Measure: millimeters (mm)
Third Angle Projection	Designed by Peter Fayers	Checked by	Approved by		©2024	Date 13 Feb 2019	A3
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			Part No: XPS-12-RB16-GNHP Cust		Issue 3.4	Sheet 3 / 3