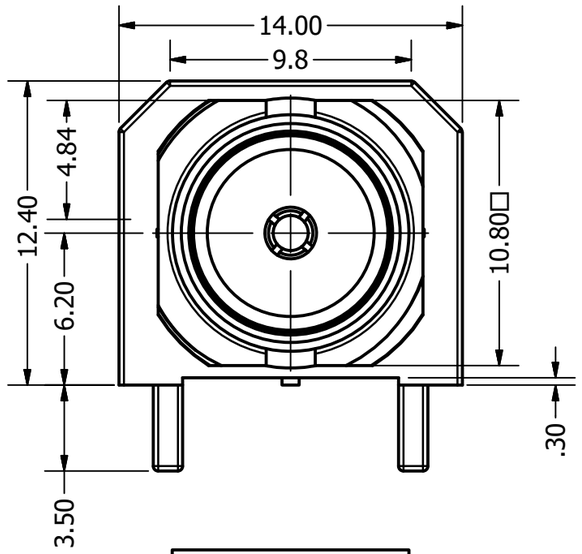
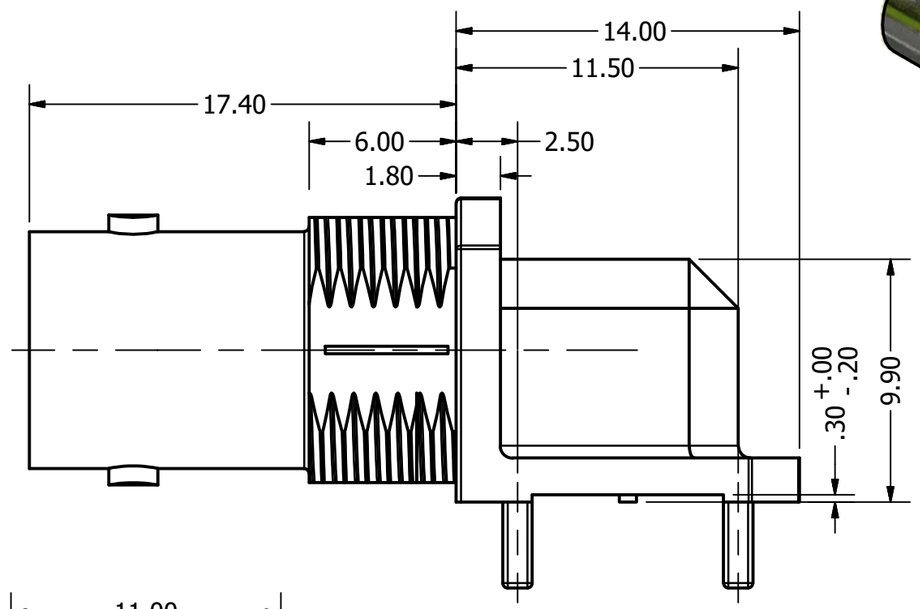
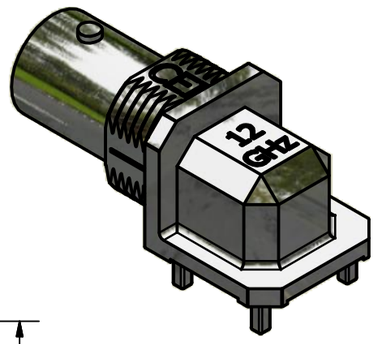
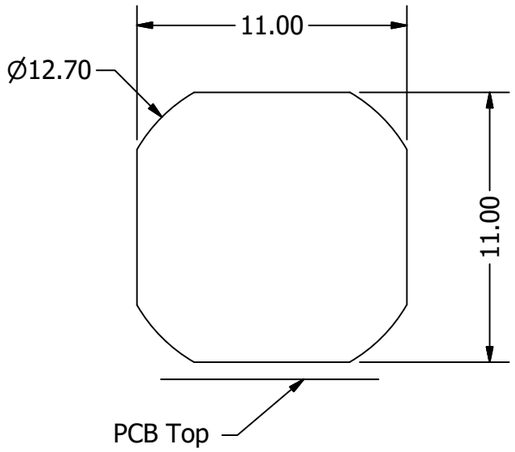


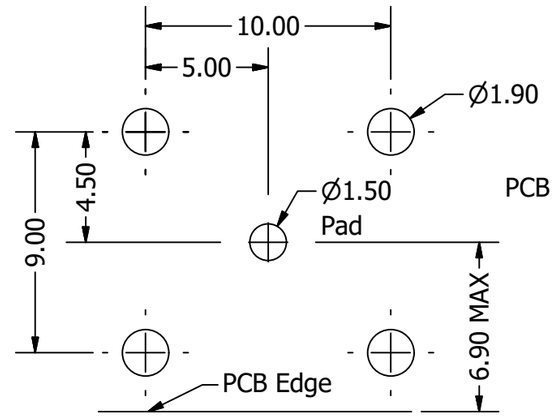




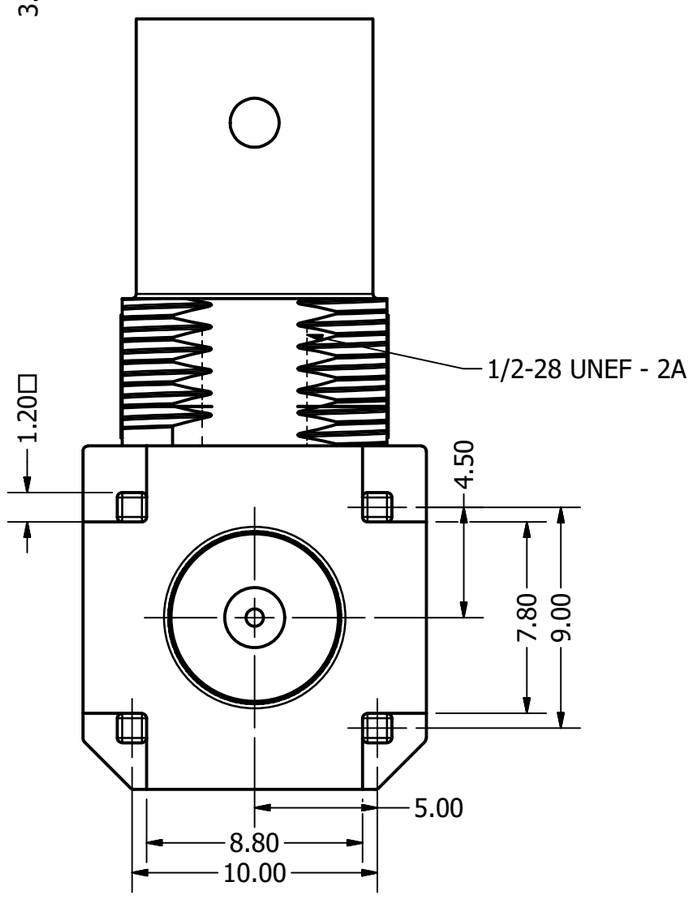


Panel Cut Out
3.5mm MAX Panel
Thickness

Supplied with
Nut And Washer



PCB Foot Print

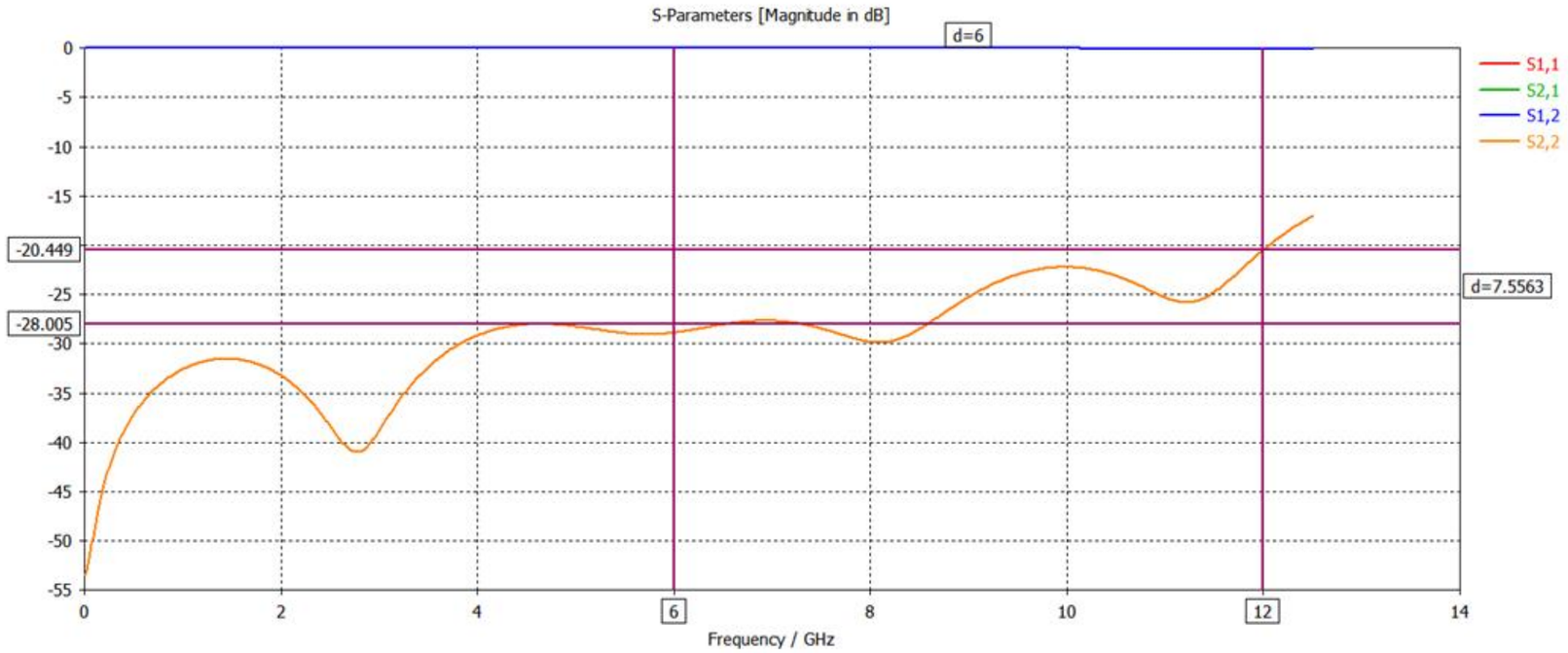


REVISION HISTORY			
REV	DESCRIPTION	DATE	DESIGNER
1.0	Origin	15/05/2015	Peter Fayers
1.1	Internal Design Chg	21/09/2015	Peter Fayers
1.2	Process Info Added	13/01/2016	Peter Fayers
1.3	Revised PCB Layout	04/05/2016	Peter Fayers
1.4	RL Data Updated	05-Sep-16	Peter Fayers
1.5	Process Info Revised	13-Oct-16	Peter Fayers
1.6	Pin Tolerance added	09-Jan-17	Peter Fayers

Design Right Protected	Material:		Finish:	Gen Tol +/- 0.20	DO NOT SCALE	
Third Angle Projection	Designed by Peter Fayers	Checked by	Approved by Date	©2014	Unit of measure: millimetres(mm) Date 15-May-15	A3
RoHS Compliant	**Cambridge Electronic Industries Ltd**		12 GHz RA BNC SMT Centre Pin Socket		C-SX-165 (NPF 5602)	Issue 1.6 / Sheet 1 / 3

Electrical:

Impedance	75 Ohms
Freq Range	0-12.0GHz
Working Voltage	500 Vrms
Dielectric withstanding voltage	1500 Vrms
Reflection Factor (VSWR)	1.11 Max DC-6.0 GHz
	1.21 Max 6.0 GHz-12.0 GHz
Contact Resistance	Centre Contact 1.5 m Ohm
	Outer Contact 1.0 m Ohm
Insulation Resistance	> 5000 Meg Ohm



Materials:

Centre Pin	Phosphor Bronze /10u" Au
Metal Parts	Die Cast Zinc/Ni
Insulator	PTFE

With BNC Male connector and No PCB element.

Processing:

Hand Solder

Wave Solder 260°C

Infrared, convection, and vapor phase Reflow

Maximum reflow time/temperature not to exceed 245°C for 3 minutes.

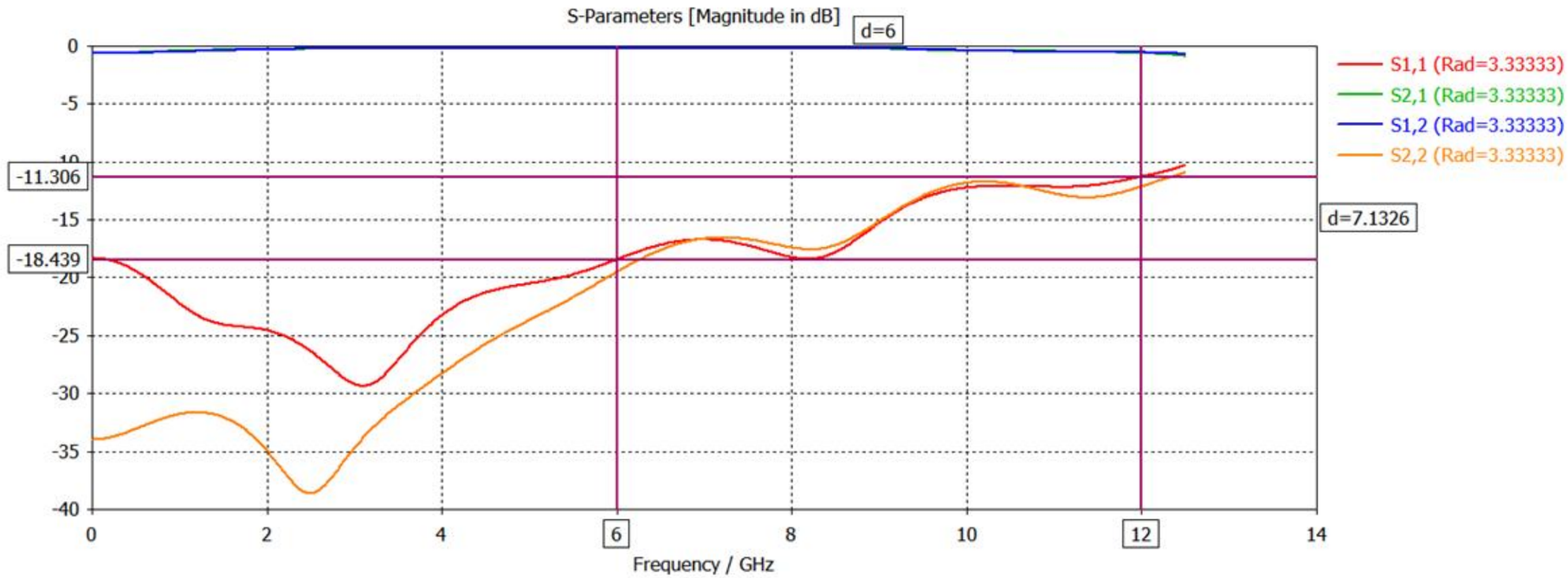
Enviromental:

Temp Range: -65 to +85°C

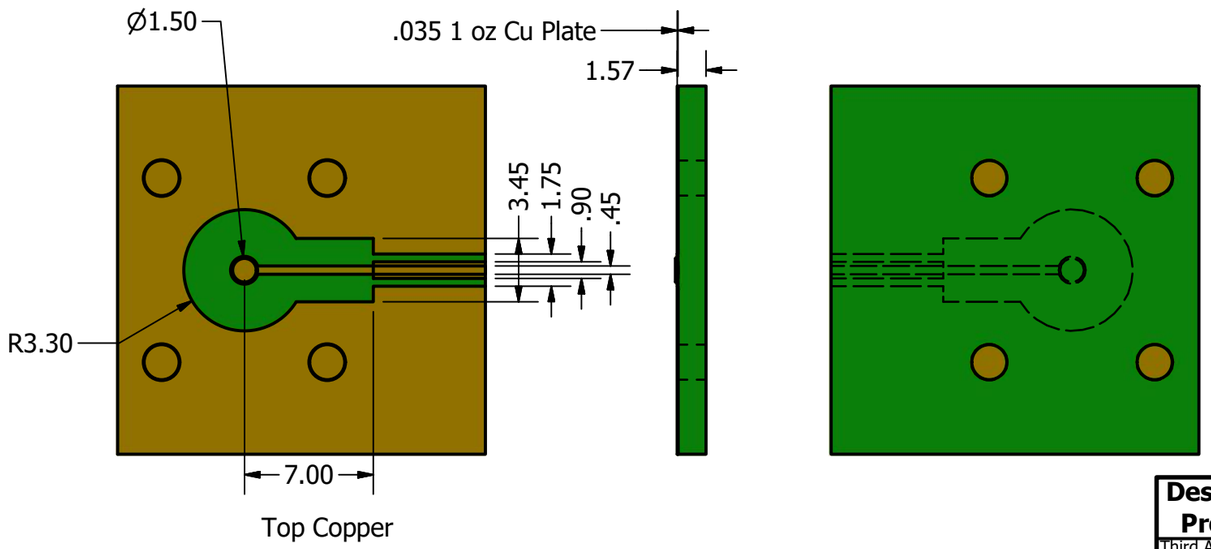
Mating cycles: 250

Design Right Protected	Material:		Finish:	Gen Tol +/- 0.20	DO NOT SCALE	
Third Angle Projection	Designed by Peter Fayers	Checked by	Approved by Date	©2014	Unit of measure: millimetres(mm) Date 15-May-15	A3
RoHS Compliant	**Cambridge Electronic Industries Ltd**		12 GHz RA BNC SMT Centre Pin Socket			
			C-SX-165 (NPF 5602)		Issue 1.6	Sheet 2 / 3

Application example



With Male BNC and Planar Wave Guide PCB



This example is for guidence only.

Note:

a. Results are simulated
b. The centre pin is SMT
c. Male BNC connector is CEI XBT-1068-BGAS
d. PCB substraight dielectric constant = 4.3
e. 1 oz copper clad

Design Right Protected	Material:		Finish:	Gen Tol +/- 0.20	DO NOT SCALE	
Third Angle Projection					Unit of measure: millimetres(mm)	
	Designed by Peter Fayers	Checked by	Approved by Date	©2014	Date 15-May-15	A3
RoHS Compliant	**Cambridge Electronic Industries Ltd**	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.	12 GHz RA BNC SMT Centre Pin Socket			
			C-SX-165 (NPF 5602)		Issue 1.6	Sheet 3 / 3