

REVISION HISTORY			
REV	DESCRIPTION	DATE	DESIGNER
1.0	Origin	05/09/2012	Peter Fayers
1.1	Assembly Inst Added	12/08/2015	Peter Fayers
1.2	Spec Added	26/10/2015	Peter Fayers

Design Right Protected Third Angle Projection 	Material:		Finish:	Gen Tol +/- 0.20	DO NOT SCALE	
	Designed by Peter Fayers		Checked by	Approved by	Date ©2013	A3
RoHS Compliant	Cambridge Electronic Industries Ltd	<small>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.</small>		12GHz BNC Plug for Belden 1694A		
				XBT-1068-BGAS (NPF 4448)		Issue 1.2 Sheet 1 / 3

D

C

B

A

A

A

A

Electrical:

Impedance 75 Ohm s

Freq Range 0-12.0 GHz

Working Voltage 500 Vrm s

Dielectric withstanding voltage 1500 Vrms

Reflection Factor (VSWR) 1.25 Max DC-12.0 GHz

Contact Resistance Centre Contact 1.5 m Ohm

Outer Contact 1.0 m Ohm

Insulation Resistance > 5000 Meg Ohm

Mechanical:

Coupling Nut Retention 100 lbs

Cable Retention 40 lbs min

Environmental:

Temp Range: -65 to +85°C

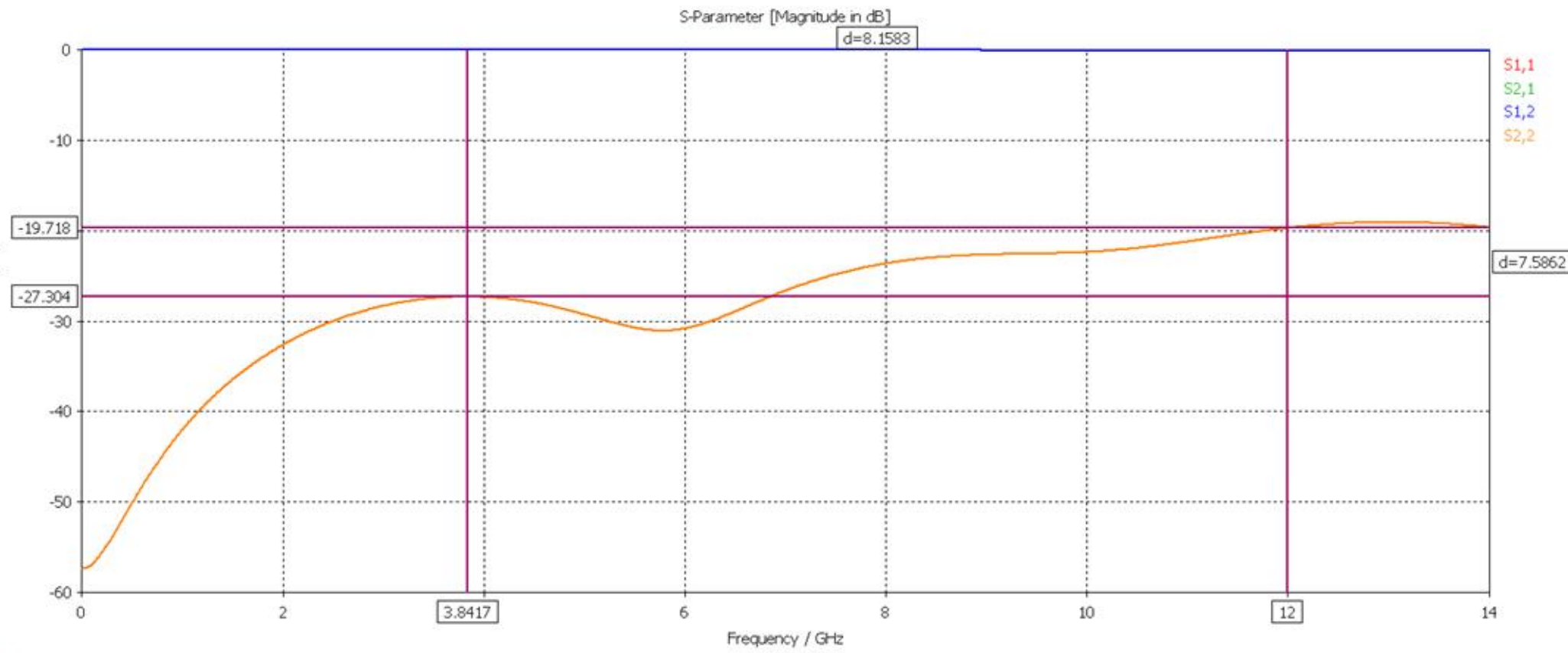
Mating cycles: 250

Processing:

Hand Solder

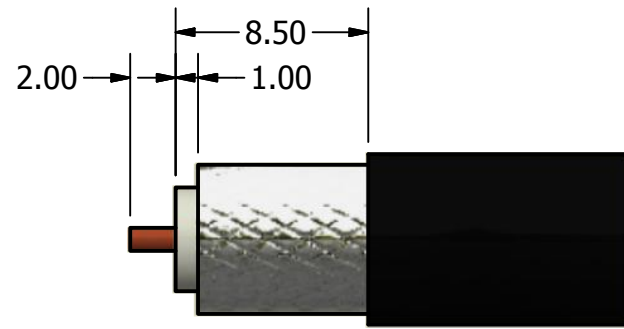
Crimp

Return Loss Graph
of 12 GHz BNC Plug Part No: XBT-1068-BGAS
mated to 12GHz end launch BNC Socket
Part No: C-SX-141

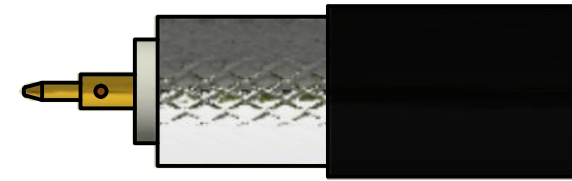


Materials List				
ITE	QTY	DESCRIPTION	MATERIAL	FINISH
1	1	Split Washer	Brass C3604	70 Micro Inches Ni
2	1	Spring Washer	BeCu C17300 M25	Nat
3	1	Plain Washer	Brass C3604	70 Micro Inches Ni
4	1	Gasket	Rubber, Silicone	Red
5	1	Inner Barrel	PhosBronze C5441 B+H	5 Micro Inches Au
6	1	Coupling Nut	Brass C3604	70 Micro Inches Ni
7	1	Crimp Sleeve	Brass C3604	70 Micro Inches Ni
8	1	Insulator	Polytetrafluoroethylene	Nat
9	1	Contact	PhosBronze C5441 B+H	10 Micro Inches Au
10	1	Cable Pin	Brass C3604	10 Micro Inches Au

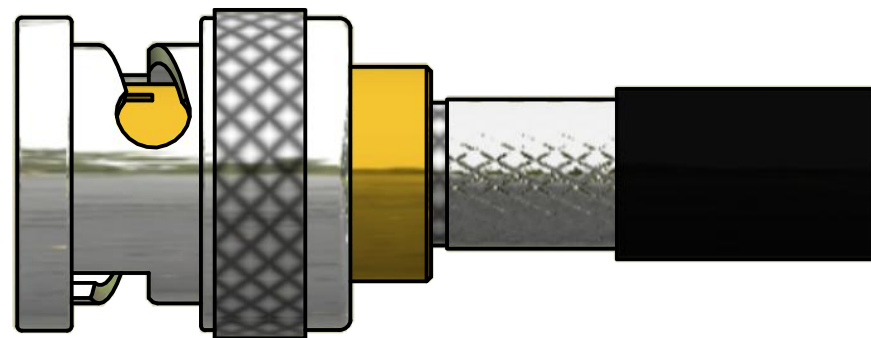
Design Right Protected Third Angle Projection	Material:		Finish:		Gen Tol +/- 0.20	DO NOT SCALE	
	Designed by Peter Fayers		Checked by	Approved by	Date	©2013	Unit of measure: millimetres(mm)
RoHS Compliant	Cambridge Electronic Industries Ltd		This document and all the data contained herein is and shall 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.		12GHz BNC Plug for Belden 1694A		
					XBT-1068-BGAS (NPF 4448)		Issue 1.2 Sheet 2 / 3



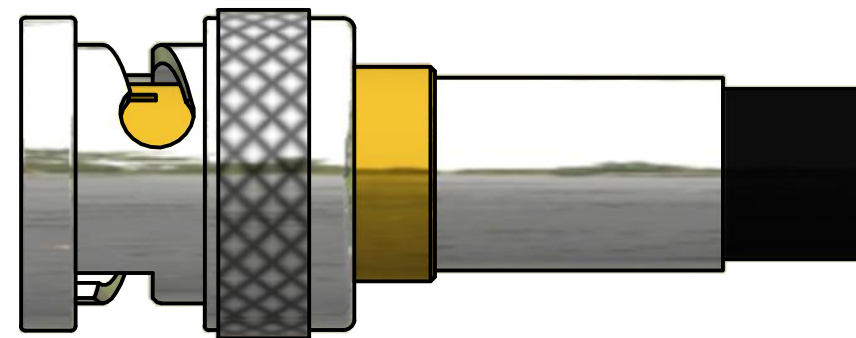
1. Strip Coaxial Cable according to strip dimensions shown.



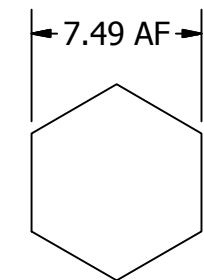
2. Solder Cable Pin to Centre Conductor. Ensure Pin abuts the Insulator. Solder Joint **must** meet IPC-620 Standards.
3. Slide the Crimp sleeve over the Cable.



4. Push Cable/Pin Assembly into the BNC connector Body. Ensure that the Cable Pin is fully home. The Foil should be inside the Connector Body and the Wire Braid should be on the outside of the Body.

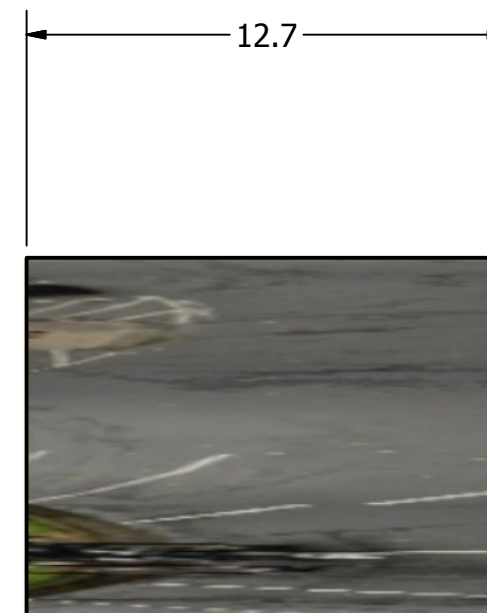
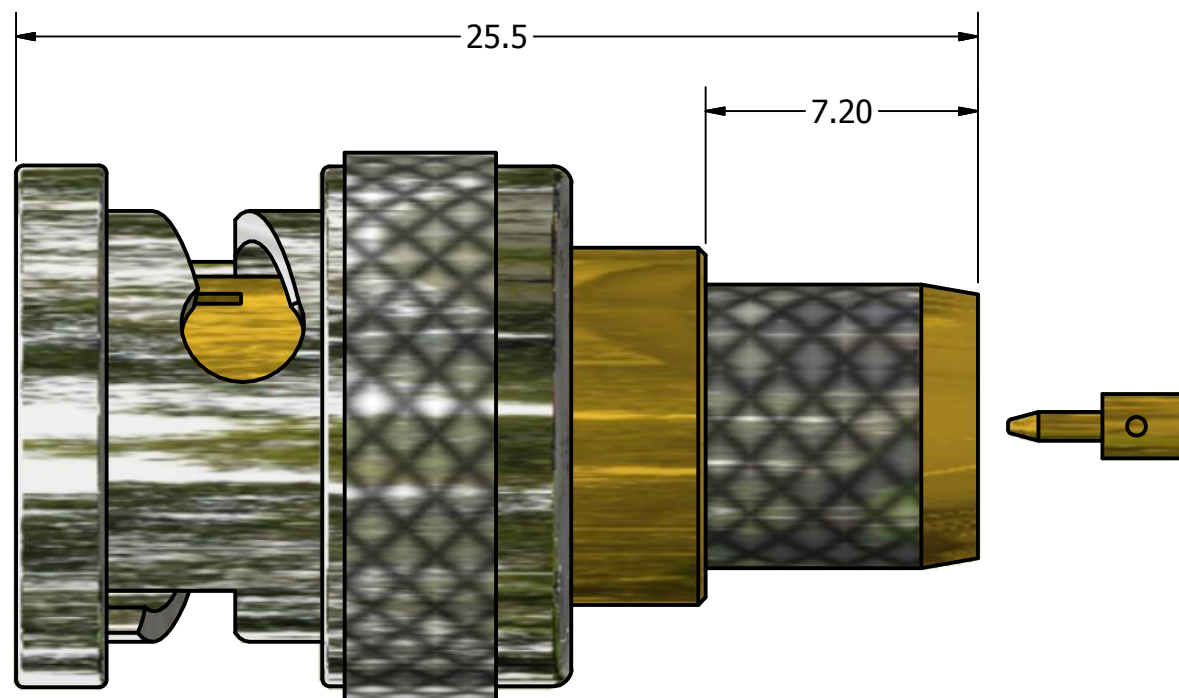
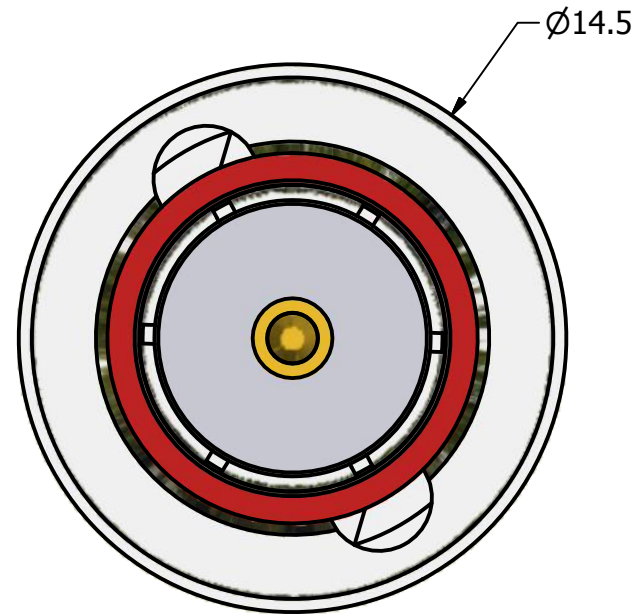


5. Slide the Crimp Sleeve to the back of the BNC Body and crimp with a Single Crimp close to the BNC Body.

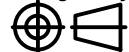


Crimp Dimensions
For Crimp Sleeve
TLG 110
(Green Handle)

Design Right Protected <small>Third Angle Projection</small> 	Material:		Finish:	Gen Tol +/- 0.20	DO NOT SCALE		
	Designed by Peter Fayers		Checked by	Approved by	Date	©2013	Unit of measure: millimetres(mm)
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.		12GHz BNC Plug for Belden 1694A		
					XBT-1068-BGAS (NPF 4448)		Issue 1.2 Sheet 3 / 3



REVISION HISTORY			
REV	DESCRIPTION	DATE	DESIGNER
1.0	Origin	25/04/2016	Peter Fayers

Design Right Protected Third Angle Projection 	Material:		Finish:	Gen Tol +/- 0.20	DO NOT SCALE Unit of measure: millimetres(mm)	
	Designed by Peter Fayers	Checked by	Approved by	Date ©2016	Date 25/04/2016	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.		12GHz BNC Plug for Belden 1794A & B4794R		
				XBT-1068-BGBD		Issue 1.0 Sheet 1 / 3

D

C

B

A

A

B

C

D

Electrical:

Impedance 75 Ohm s

Freq Range 0-12.0 GHz

Working Voltage 500 Vrm s

Dielectric withstanding voltage 1500 Vrms

Reflection Factor (VSWR) 1.25 Max DC-12.0 GHz

Contact Resistance Centre Contact 1.5 m Ohm

Outer Contact 1.0 m Ohm

Insulation Resistance > 5000 Meg Ohm

Mechanical:

Coupling Nut Retention 100 lbs

Cable Retention 40 lbs min

Environmental:

Temp Range: -65 to +85°C

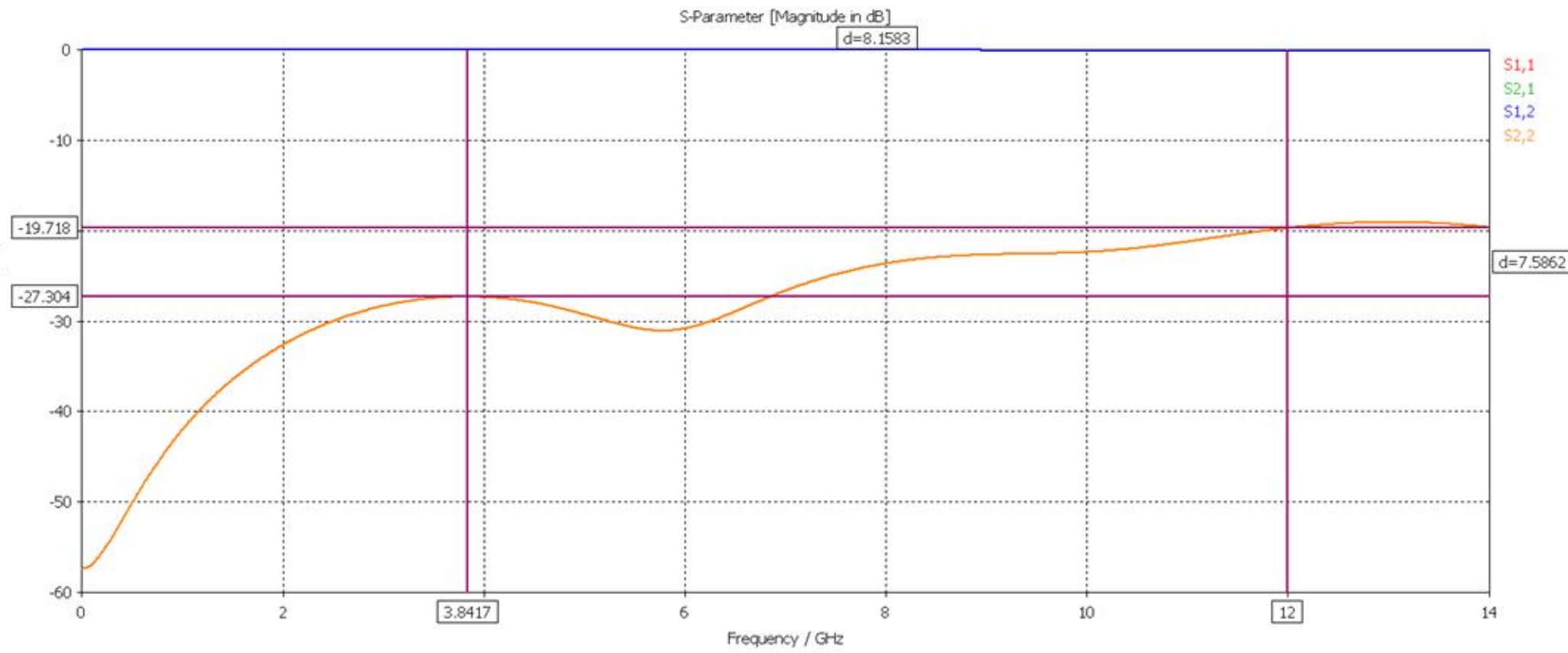
Mating cycles: 250

Processing:

Hand Solder

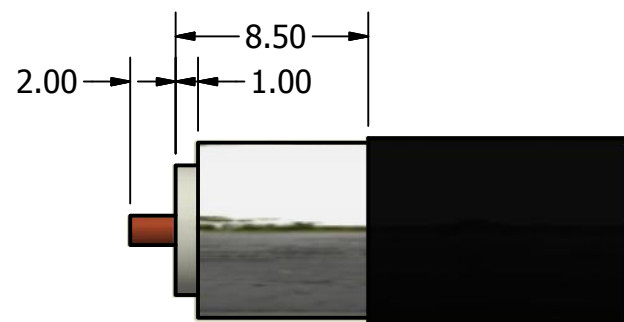
Crimp

Return Loss Graph
of 12 GHz BNC Plug Part No: XBT-1068-BGAS
mated to 12GHz end launch BNC Socket
Part No: C-SX-141



Materials List				
ITE	QTY	DESCRIPTION	MATERIAL	FINISH
1	1	Split Washer	Brass C3604	70 Micro Inches Ni
2	1	Spring Washer	BeCu C17300 M25	Nat
3	1	Plain Washer	Brass C3604	70 Micro Inches Ni
4	1	Gasket	Rubber, Silicone	Red
5	1	Inner Barrel	PhosBronze C5441 B+H	5 Micro Inches Au
6	1	Coupling Nut	Brass C3604	70 Micro Inches Ni
7	1	Crimp Sleeve	Brass C3604	70 Micro Inches Ni
8	1	Insulator	Polytetrafluoroethylene	Nat
9	1	Contact	PhosBronze C5441 B+H	10 Micro Inches Au
10	1	Cable Pin	Brass C3604	10 Micro Inches Au

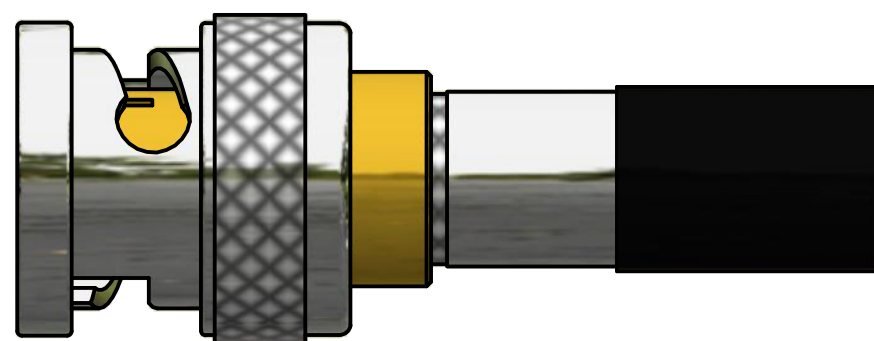
Design Right Protected Third Angle Projection	Material:		Finish:		Gen Tol +/- 0.20	DO NOT SCALE	
	Designed by Peter Fayers		Checked by	Approved by	Date	©2016	Unit of measure: millimetres(mm)
RoHS Compliant	Cambridge Electronic Industries Ltd		This document and all the data contained herein is and shall 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.		12GHz BNC Plug for Belden 1794A & B4794R		
	XBT-1068-BGBD		Issue 1.0		Sheet 2 / 3		



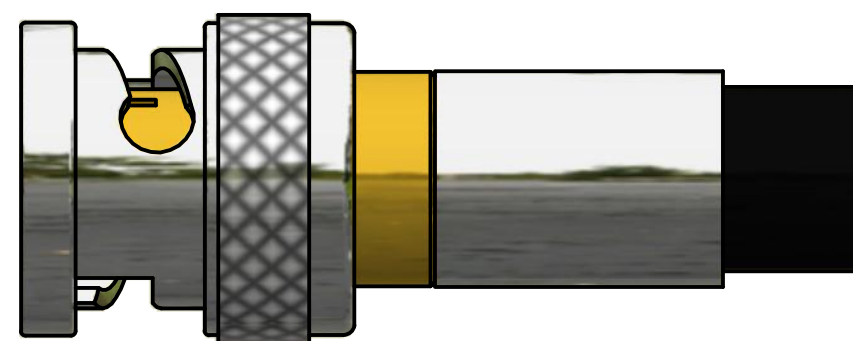
1. Strip Coaxial Cable according to strip dimensions shown.



2. Solder Cable Pin to Centre Conductor. Ensure Pin abuts the Insulator. Solder Joint **must** meet IPC-620 Standards.
3. Slide the Crimp sleeve over the Cable.



4. Push Cable/Pin Assembly into the BNC connector Body. Ensure that the Cable Pin is fully home. The Foil should be inside the Connector Body and the Wire Braid should be on the outside of the Body.



5. Slide the Crimp Sleeve to the back of the BNC Body and crimp with a Single Crimp close to the BNC Body.



Crimp Dimensions For Crimp Sleeve

Design Right Protected <small>Third Angle Projection</small> 	Material:		Finish:	Gen Tol +/- 0.20	DO NOT SCALE		
	Designed by Peter Fayers		Checked by	Approved by	Date	©2016	Unit of measure: millimetres(mm)
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.		12GHz BNC Plug for Belden 1794A & B4794R		
			XBT-1068-BGBD		Issue 1.0	Sheet 3 / 3	