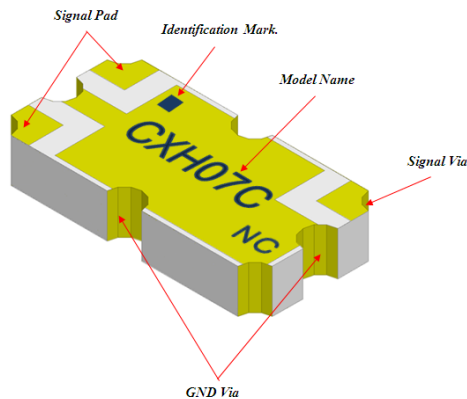


1. Description

. Part number: CXH07C



. Features

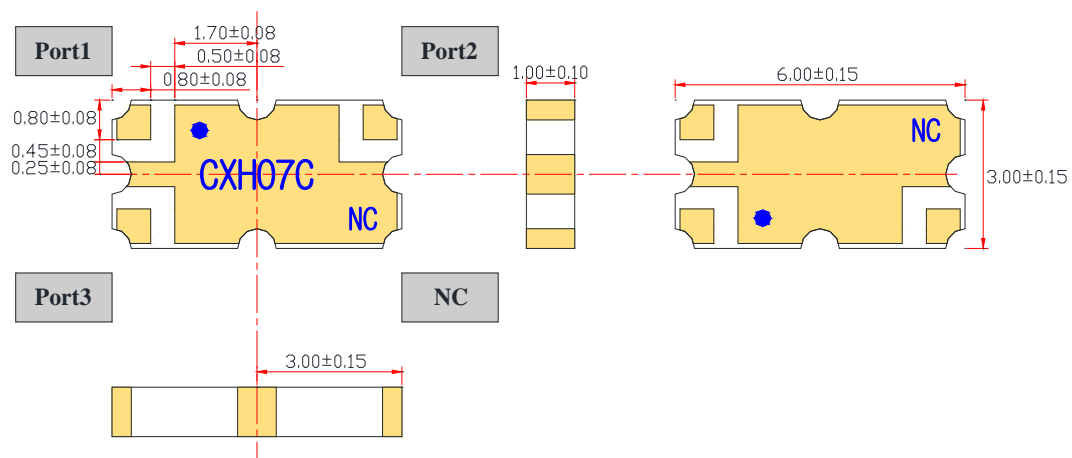
- Surface mount type
- **RoHS** Compliance (Pb Free)
- LTCC base (Er = 5.95)
- Low loss Silver (Ag) Conductor
- Gold (Au) plating finish

2. Electrical Specification

Freq. (MHz)	Insertion Loss max (dB)	Amplitude Balance max (dB)	Phase Balance(S21) max (degrees)
770~780	-0.5	±0.3	90±5.0
VSWR(S33) Max	Power Capacity Avg. (Watt)	Operating Temp. (°C)	
1.2	20	-55 to +125	

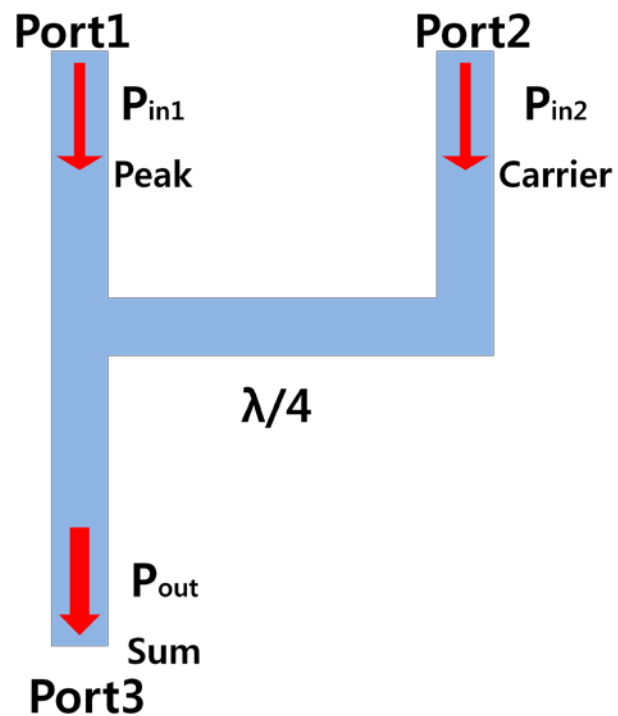
3. Mechanical Specification

3.1 Outline Dimension



[Unit = mm]

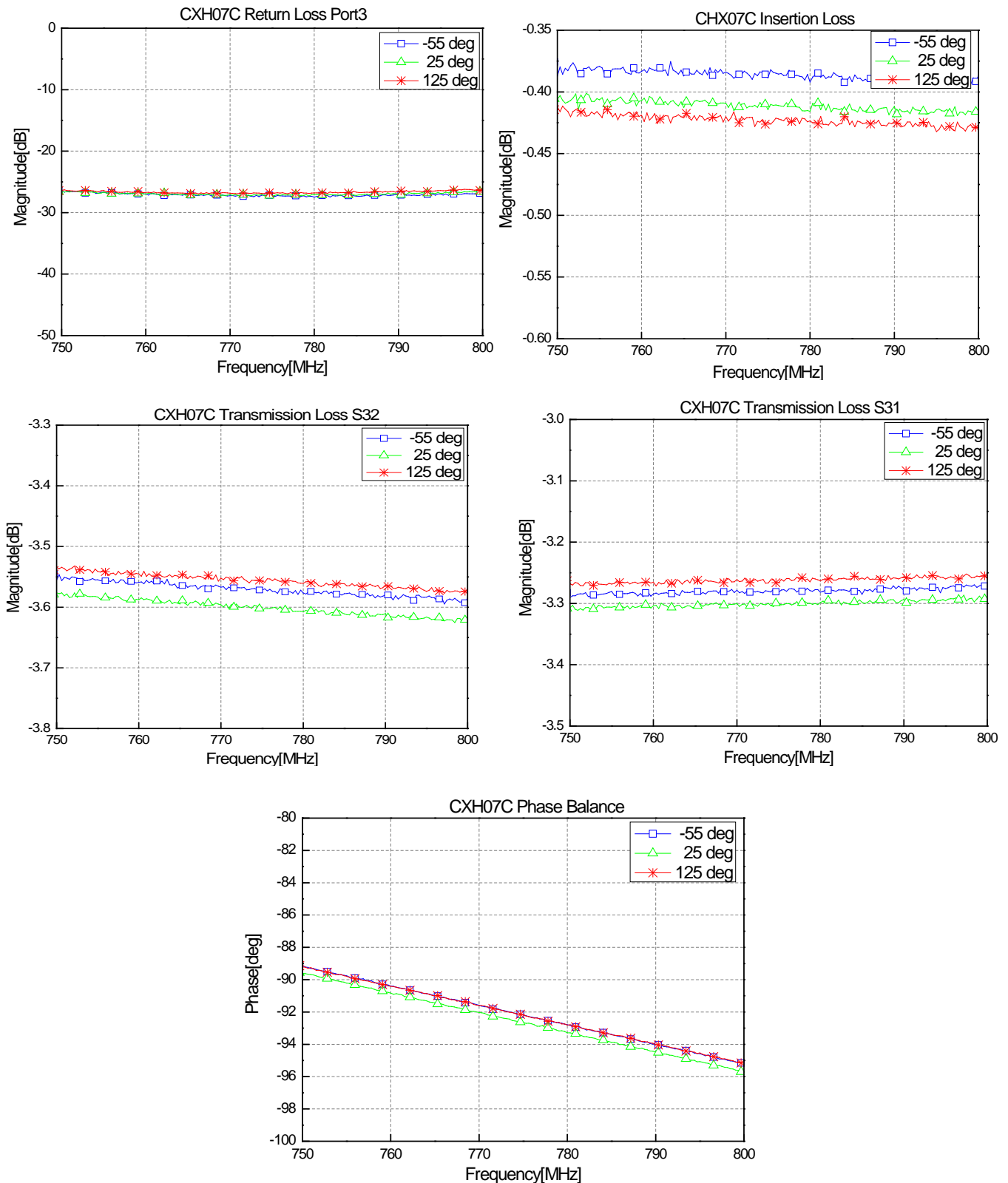
4. Schematic Drawing



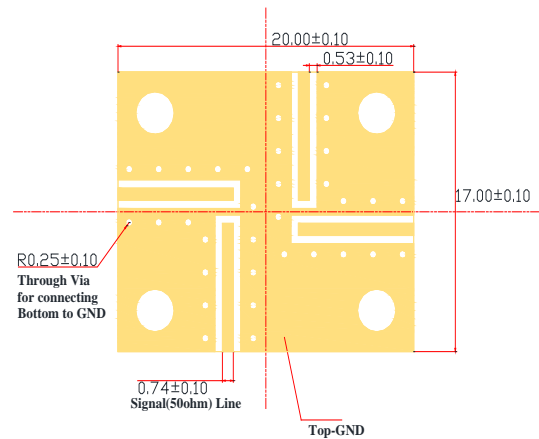
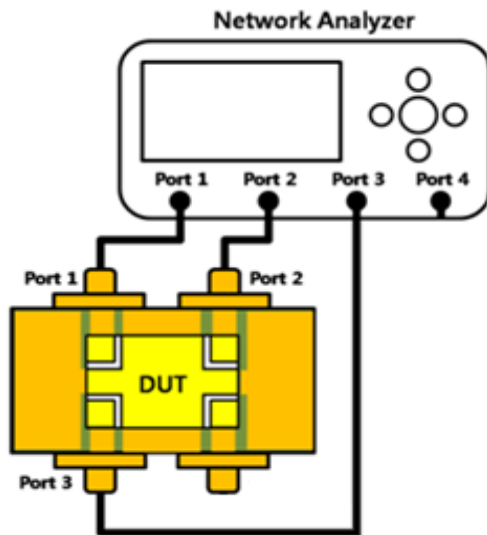
5. Port Configuration

Configuration	Port 1	Port 2	Port 3
	Peak Amp. port	Main Amp. port	Sum port

6. Operation Curve



7. Test Method




- * RN2 Test Board
- FR4 board
 - Dielectric constant 4.4
 - Board thickness 0.4mm
 - Copper 1 Oz

To recognize the specified performance of the part, it has to be evaluated on the RN2 test board shown above.

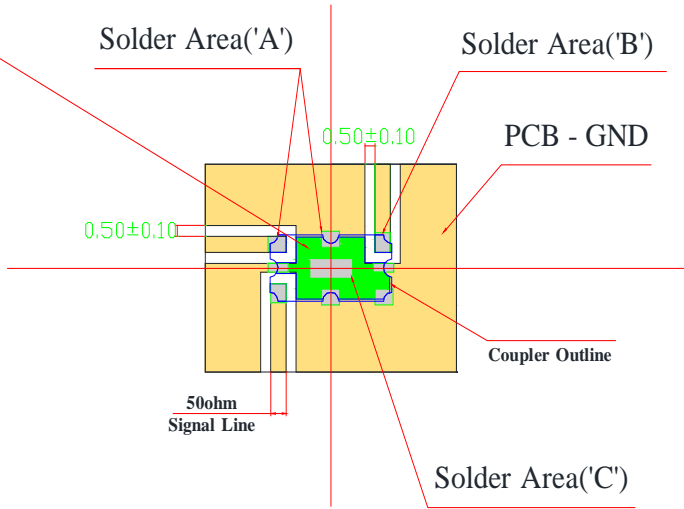
1. Calibrate the network analyzer
2. Measure the data of **Return Loss** through Port 3 to Port 3 (S33)
3. Measure the data of **Transmission1** through Port 1 to Port 3 (S31)
4. Measure the data of **Transmission2** through Port 2 to Port 3 (S32)
5. Calculate **Insertion Loss** in function of the below mathematical formula.

Parameter	Mathematical formula
Return Loss	$20 \cdot \log S_{33} $
Insertion Loss	$10 \cdot \log (S_{32}^2 + S_{31}^2)$
Amplitude Balance	$10 \cdot \log \left(\frac{P_{trans1}}{\frac{P_{trans1} + P_{trans2}}{2}} \right)$
Phase Balance	$\text{Phase}_{(S32)} - \text{Phase}_{(S31)}$

8. Recommended PCB layout and Solder mask pattern

PROJECTION	No.	DATE	REVISION & DESCRIPTION	SIGNATURE	
				REVIEWED	CHECKED
	1	2014.06.11	New - Drawing		
	2				
	3				

Attention Solder Resistor Area
Solder Resistor Should be printed on the board



NOTE.

1. Test Solder Cream : SAC-305 (Alpa Metal)
2. Lead Free Solder Alloy : Sn/Ag/Cu Ratio Of 96.5/3.0/0.5
3. Solder Area ('A') Demension : 0.88 mm by 0.74 mm
4. Solder Area ('B') Demension : 0.74 mm by 0.88 mm
5. Solder Area ('C') Demension : 2.00 mm by 0.80 mm

No.	DESCRIPTION	UNIT	TOTAL	PERUNIT	TOTAL		
						SCALE	
TITLE	Doherty Combiner C size - Recommended Solder Quantity &Area	RN2 DWG No.	14-0611-01			SIZE	
						A4	DIMENSION mm