

# DATA SHEET

WIRELESS COMPONENTS

BALUN

BLNI608LL00R2400A

2.4 – 2.5 GHZ

1608 Series



FEATURES

- Compact size design
- RoHS compliant

APPLICATIONS

- WLAN, 802.11a/b/g/n
- Bluetooth
- ISM Band

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

**PART NUMBER**

**BLN 1608 LL 00 R 2400A**  
 (1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

BLN = Balun

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**(2) SIZE**

1608 = 1.6 × 0.8

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**(3) MATERIALS**

Material Code LL

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**(4) TYPE**

00 = Type00

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**(5) PACKING STYLE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

2400 = 2.4GHz

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**PHYCOMP CTC**

CBA4711715002454K

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**I2NC**

471171500245

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**SPECIFICATION**

Table 1

DESCRIPTION	VALUE
Pass Band	2400~2500 MHz
Unbalanced Impedance	50 Ω
Balanced Impedance	50 Ω
Unbalanced port V.S.W.R. (Return Loss)	2.0 (Max) 10dB (Min)
Insertion Loss	1.2 dB (Max) at 25 °C 1.5 dB (Max) at -25 ~ 85 °C
Phase Difference	180 ±10 degree
Amplitude Difference	1 dB (Max)

**DIMENSIONS**

Table 2 Machinical Dimension

	DIMENSION
L (mm)	1.60 ±0.15
W (mm)	0.80 ±0.15
T (mm)	0.65 ±0.15
P1 (mm)	0.30 ±0.15
P2 (mm)	0.30 ±0.15
P3 (mm)	0.30 ±0.15
P4 (mm)	0.30 ±0.15
P5 (mm)	0.30 ±0.15
P6 (mm)	0.30 ±0.15
D1 (mm)	0.10 ±0.05
D2 (mm)	0.55 ±0.15
D3 (mm)	0.25 ±0.15
D4 (mm)	0.20 ±0.15

**OUTLINES**

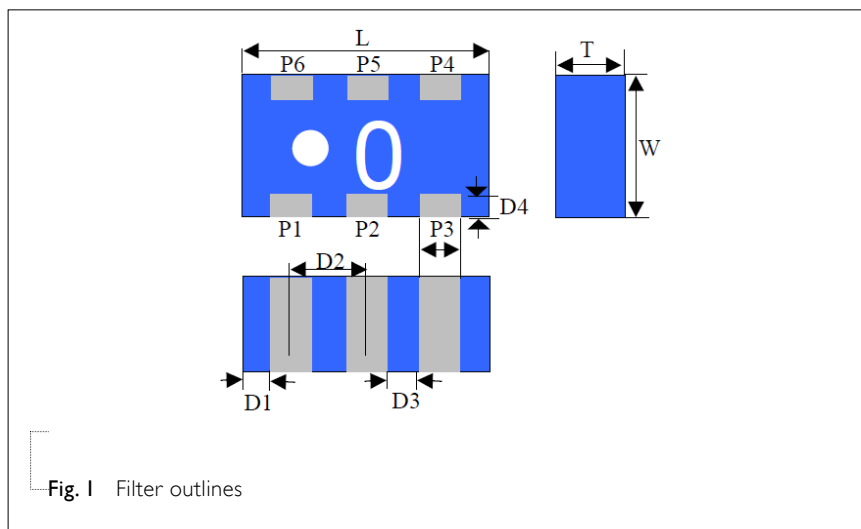


Table 3 Termination configuration

TERMINAL NAME	FUNCTION
P1	Unbal. Port
P2	Ground
P3	Balanced Port
P4	Balanced Port
P5	Ground
P6	Not Connect

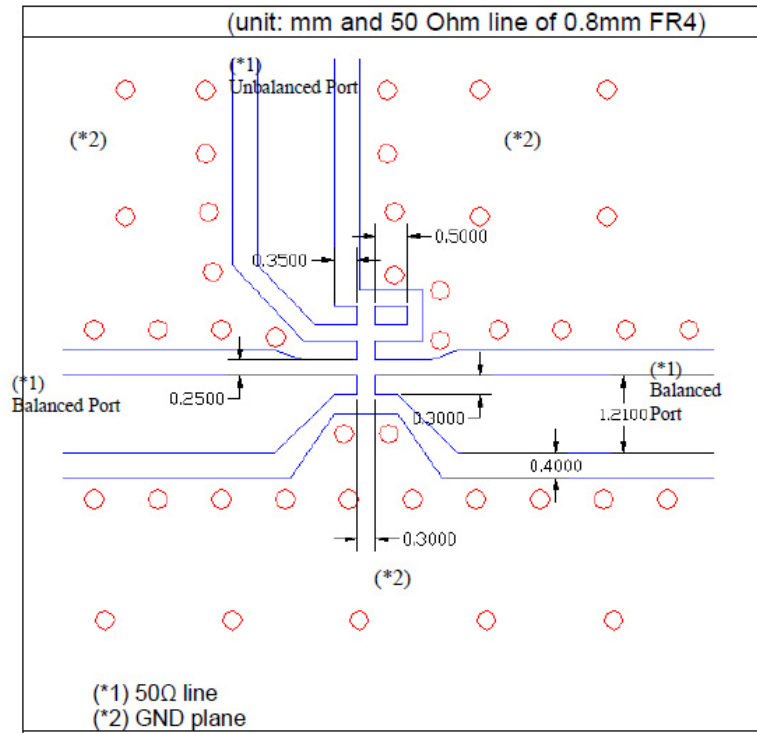


Fig. 2 Reference design of evaluation board

**ELECTRICAL PERFORMANCES**

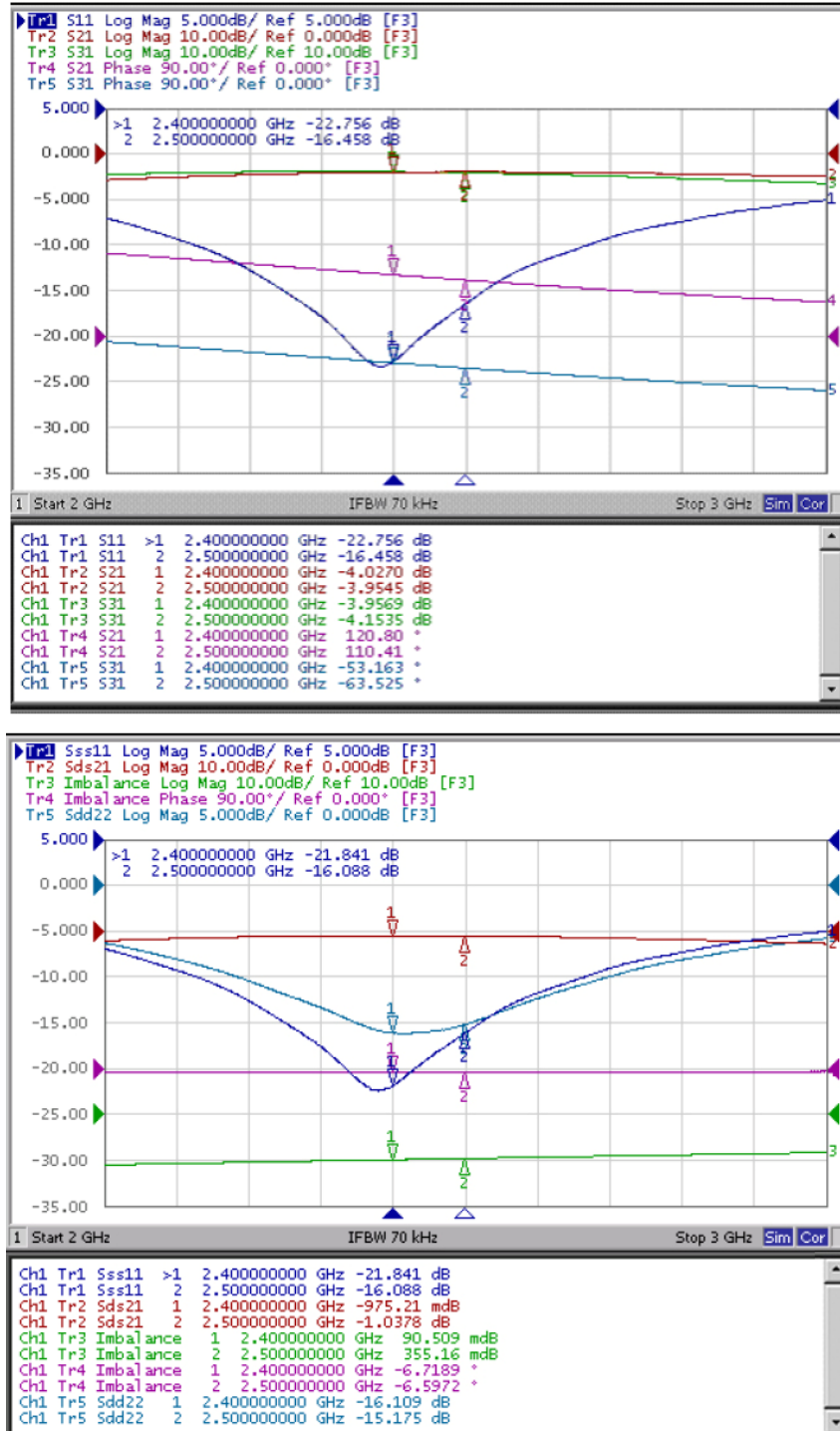


Fig. 3 Frequency Characteristics

- Unbalanced port return loss (Sss11)
- Balanced port return loss (Sdd22)
- Insertion loss (Sds21, differential port to single-ended port)
- Imbalance (S21/S31 amplitude and phase difference)
- Measured on Agilent E5071A Network Analyzer

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Feb. 08, 2013	-	- New data sheet for Balun, 2.45 GHz application, 1608 series