

DATA SHEET

WIRELESS COMPONENTS

Balun

BLN1005LM39R2500A

2.3 – 2.7GHz

1005 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 1005 LM 39 R 2500A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

BLN = Balun

(2) SIZE

1005 = 1.0 × 0.5

(3) MATERIALS

Material Code LM

(4) ANTENNA TYPE

39 = Type 39

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2500 = 2.3 - 2.7GHz

PHYCOMP CTC

CBA471151639237K

I2NC

471151639237

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Pass Band	2300~2690 MHz
Unbalanced Impedance	50 Ω
Balanced Impedance	100 Ω
Unbalanced port V.S.W.R. (Return Loss)	2.0 (Max) 10dB (Min)
Insertion Loss	0.55 dB (Max) at 25 °C 0.65 dB (Max) at - 40~85 °C
Phase Difference	180 ±17 degree
Amplitude Difference	±3.7 dB (Max)

DIMENSIONS

Table 2 Machinical Dimension

	DIMENSION
L (mm)	1.00 ±0.10
W (mm)	0.50 ±0.10
T (mm)	0.35 ±0.10
P1 (mm)	0.30 ±0.10
P2 (mm)	0.30 ±0.10
P3 (mm)	0.30 ±0.10
P4 (mm)	0.30 ±0.10
D1 (mm)	0.10 ±0.10
D2 (mm)	0.20 ±0.10
D3 (mm)	0.15 ±0.10

OUTLINES

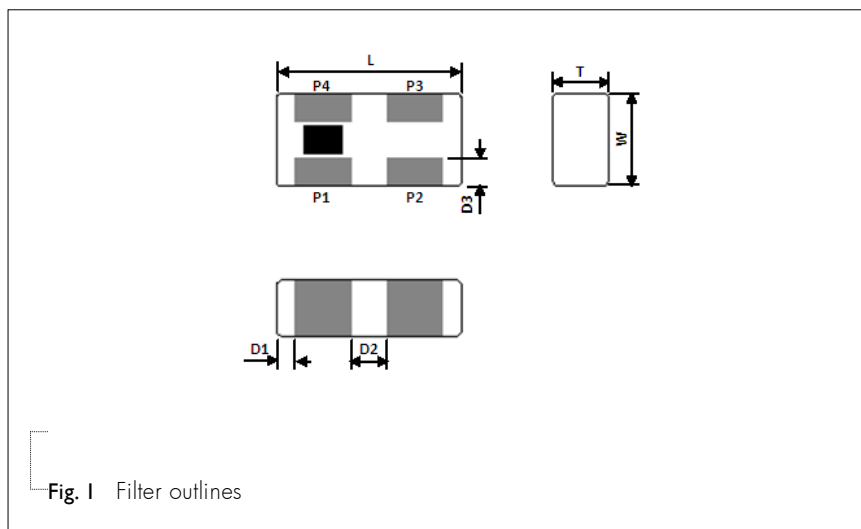
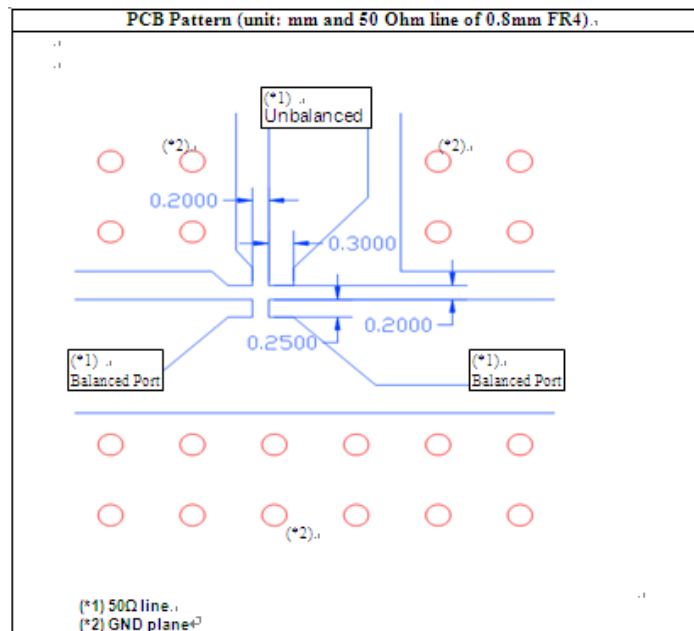


Table 3 Termination configuration

TERMINAL NAME	FUNCTION
P1	(1)Unbalanced
P2	(2)GND
P3	(3)Balanced
P4	(4)Balanced



Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

Fig. 2 Reference design of evaluation board

ELECTRICAL PERFORMERS

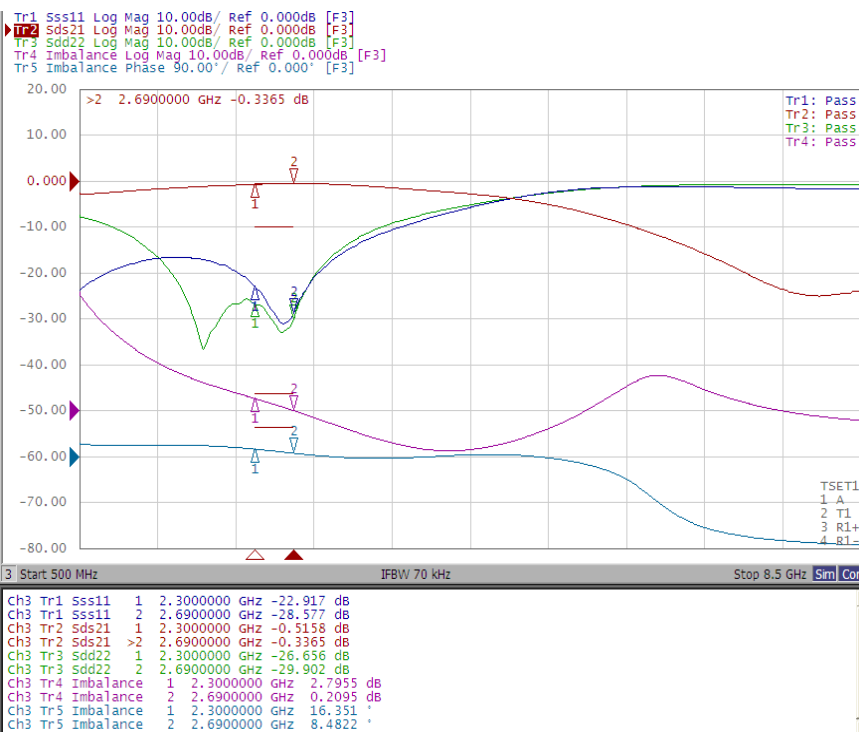


Fig. 3 Frequency Characteristics

- Measured on Agilent E5071C Network Analyzer
- Unbalanced port return loss (Sss11)
- Insertion loss (Sds21, differential port to single-ended port) and Imbalance (S21/S31 amplitude and phase difference)

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Jul. 07, 2016 -		- New data sheet for Balun, 2.3 – 2.7GHz application, 1005 series