

**Description: 1005 2.3-2.7GHz Balun**

**PART NUMBER: BLN1005LM39R2500A**

**Features:**

- Compact size : 1.00x0.50x0.35mm
- RoHS compliant

**Applications:**

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

**ELECTRICAL SPECIFICATIONS**

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

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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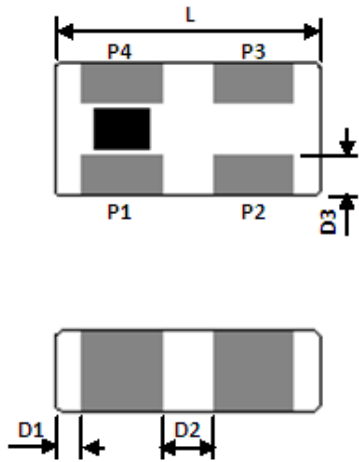


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**MECHANICAL DIMENSION**

Outline



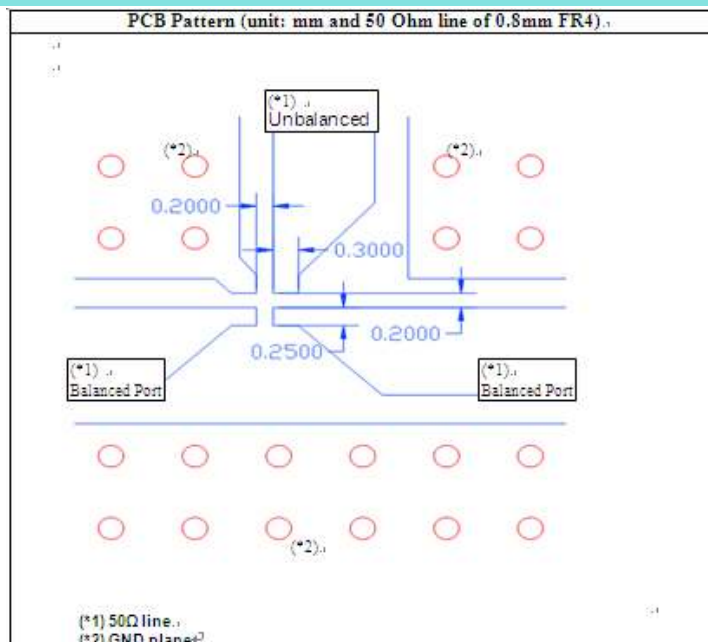
Termination

Terminal name	function
P1	Unbal.
P2	GND
P3	Balanced
P4	Balanced

Mechanical

	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

**Reference design of EVB**



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

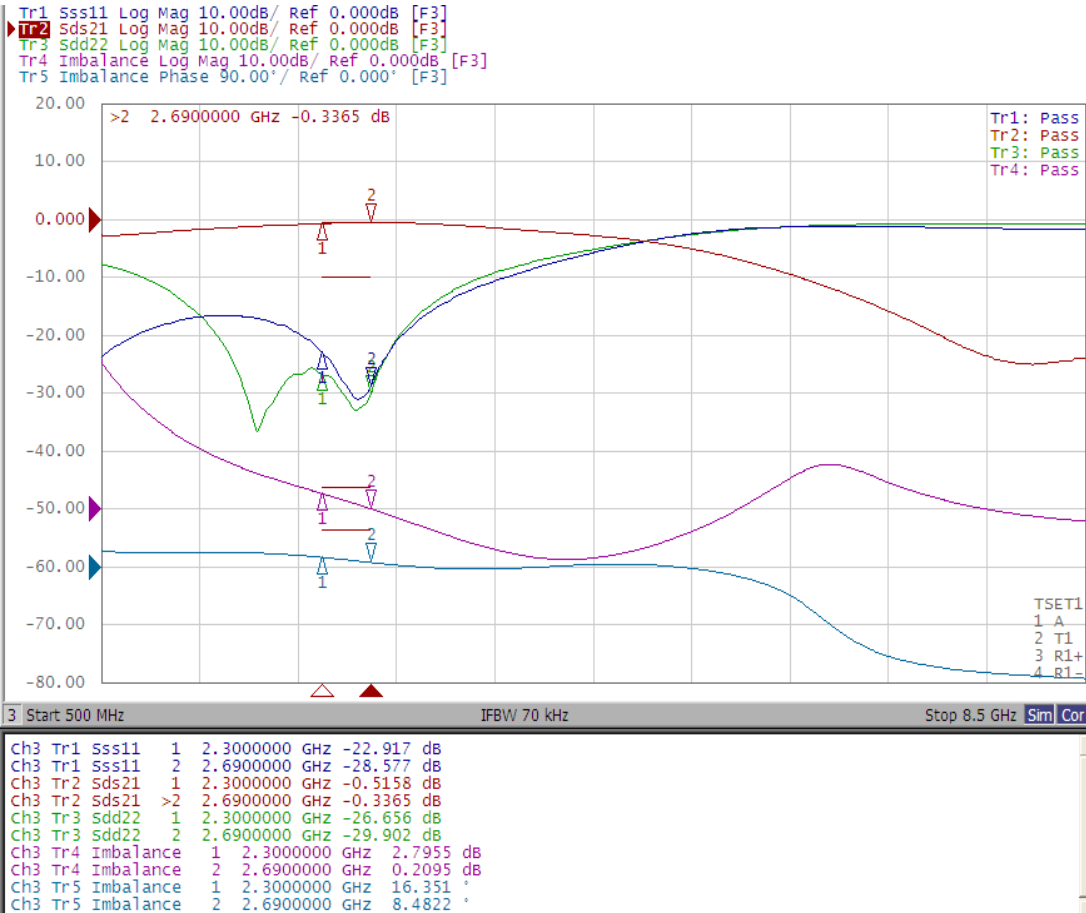
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**ELECTRICAL PERFORMANCES**



- Measured on Agilent E5071C Network Analyzer
- Unbalanced port return loss (Sss11)
- Balanced port return loss (Sdd22)
- Insertion loss (Sds21, differential port to single-ended port) and Imbalance (S21/S31 amplitude and phase difference)

Frequency Characteristics

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### REVISION HISTORY

Revision	Date	Description
Version 1	Nov. 17, 2020	- New issue