Innovative Service Around the Globe YAGEO

DATA SHEET

WIRELESS COMPONENTS

COMBO

BLF2012LM31R2400A

2.4-2.5 GHz

2012 Series

YAGEO Phycomp

Product Specification – April 23, 2013 V.0

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

BLF	2012	LM	31	R	2400A
(1)	(2)	(3)	(4)	(5)	(6)

(1) PRODUCT

BLF = Combo

(2) SIZE

2012 = 2.0 × 1.2

(3) MATERIALS

Material Code LM

(4) TYPE

31=Type 31

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2400 = 2.4GHz

PHYCOMP CTC

CBA471151431245 4K

12NC

471151431245

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Pass Band	2400-2500 MHz
Unbalanced Impedance	50Ω
Balanced Impedance	Conjugate match to MTK MT6616,MT6611 and MT6612 series
Unbalanced port V.S.W.R.	2.0 (Max.)
Balanced port V.S.W.R.	2.0 (Max.)
Insertion Loss	2.8dB (Typ.) at 25 ℃ 3.1dB (Max.) at 25 ℃ 3.6dB (Max.) at -25 ~ +85 Deg C
Ripple	0.6 dB (Max.)
Amplitude Balance	1.5 dB (Max) at 25 ℃ 1.8 dB (Max) at -40 ~ +85 ℃
Phase Differential	180 ±10 degree at 25 ℃ 180 ±15 degree at -25 ~ +85 ℃
Attenuation	35dB(Min) @880~960MHz 30dB(Min) @1710~1880MHz 20dB(Min) @1880~1990MHz 30dB(Min) @4800~5000MHz
DC Working Voltage	0 ~ 25 Volt

DIMENSIONS

Table 2 Machinical Dimension

	DIMENSION
L (mm)	2.00 ±0.15
W (mm)	1.27 ±0.15
T (mm)	0.80 ±0.15
P1 (mm)	0.39 ±0.15
P2 (mm)	0.39 ±0.15
P3 (mm)	0.39 ±0.15
P4 (mm)	0.50 ±0.15
P5 (mm)	0.39 ±0.15
P6 (mm)	0.39 ±0.15
P7 (mm)	0.39 ±0.15
P8 (mm)	0.50 ±0.15
D1 (mm)	0.20 ±0.15
D2 (mm)	0.35 ±0.15
D3 (mm)	0.30 ±0.15

OUTLINES

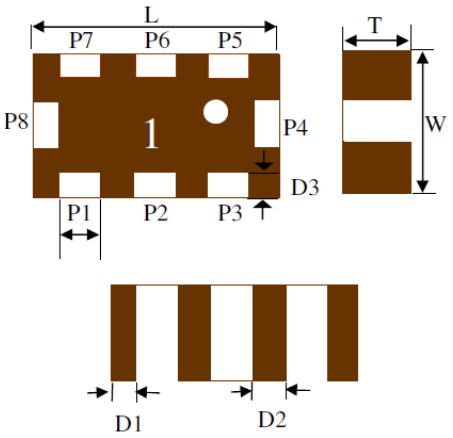


Fig. 1 Filter outlines

Table 3 Termination configuration

TERMINAL NAME	FUNCTION	TERMINAL NAME	FUNCTION
P1	Balanced	P5	Unbalanced
P2	Ground Terminal	P6	DC
P3	Balanced	P7	Not Connect
P4	Ground Terminal	P8	Ground Terminal

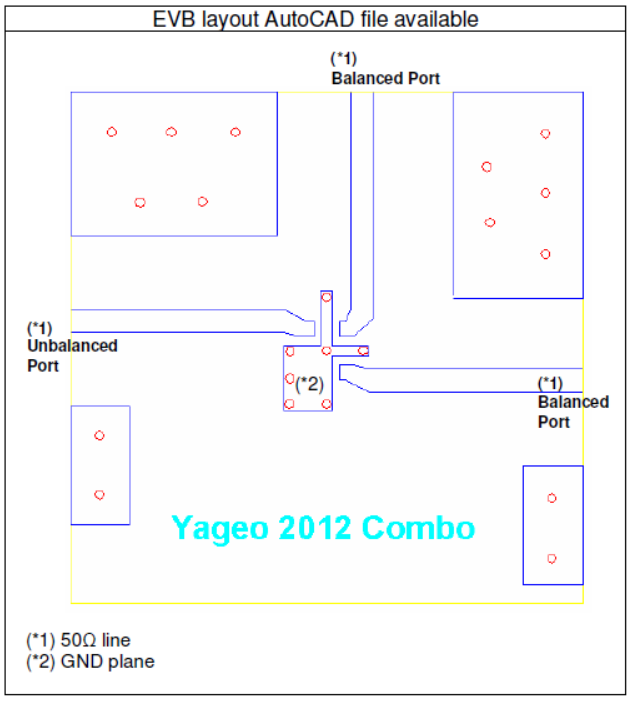
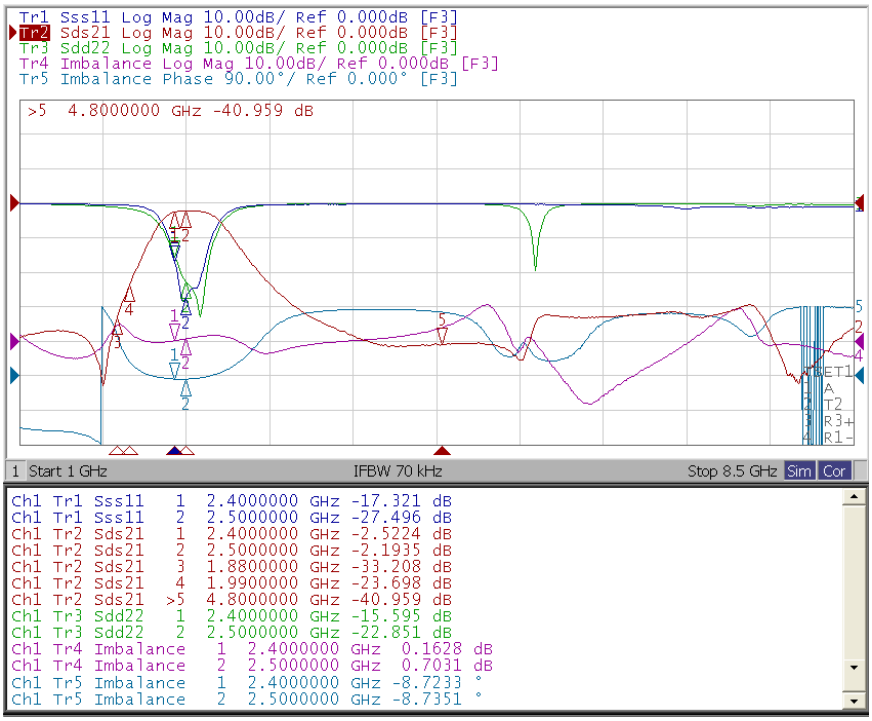


Fig. 2 Reference design of evaluation board

ELECTRICAL PERFORMANCES



- Unbalanced port return loss (Sss11, single-ended port return loss)
- Balanced port return loss (Sdd22, differential port return loss)
- Insertion loss (Sds21, differential port to single-ended port)
- Imbalance of amplitude (S21/S31, amplitude difference)
- Imbalance of phase (S21/S31, phase difference)

Fig. 3 Frequency Characteristics

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Apr. 23, 2013	-	- New data sheet for Combo, 2.45GHz application, 2012 series