Innovative Service Around the Globe YAGEO

DATA SHEET

WIRELESS COMPONENTS

Low Pass Filter

LPF1005LL50R2400A

2.4-2.5 GHz

1005 Series

YAGEO Phycomp

Product Specification – October 12, 2016 V.0

FEATURES

- Compact size design
- RoHS compliant

APPLICATIONS

- WLAN,802.11b/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

LPF	1005	LL	50	R	2400A
(1)	(2)	(3)	(4)	(5)	(6)

(1) PRODUCT

LPF = Low Pass Filter

(2) SIZE

1005 = 1.0 × 0.5

(3) MATERIALS

Material Code LL

(4) TYPE

50 = Type 50

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2400 = 2.4 GHz

PHYCOMP CTC

CFL411171650245TK

12NC

411171650245

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Pass Band	2400 - 2500 MHz
Impedance	50Ω
Insertion Loss	0.5dB (Max) at 25°C
VSWR	2.0 (Max)
Attenuation	25dB Min@ 4800 ~ 5000MHz 20dB Min@ 7200 ~ 7500MHz
Operating Temperature	-40 ~ 85 °C

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 ± 0.15
P2 (mm)	0.30 ± 0.15
P3 (mm)	0.30 ± 0.15
P4 (mm)	0.30 ± 0.15
D1 (mm)	0.15 ± 0.10
D2 (mm)	0.35 ± 0.15

OUTLINES

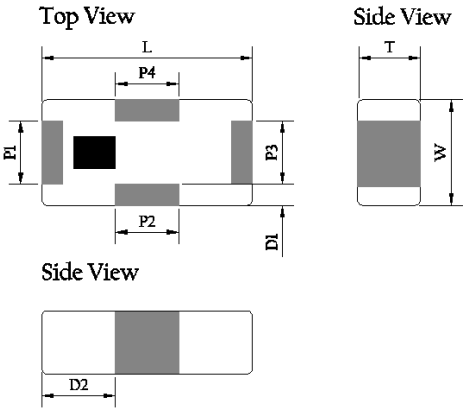
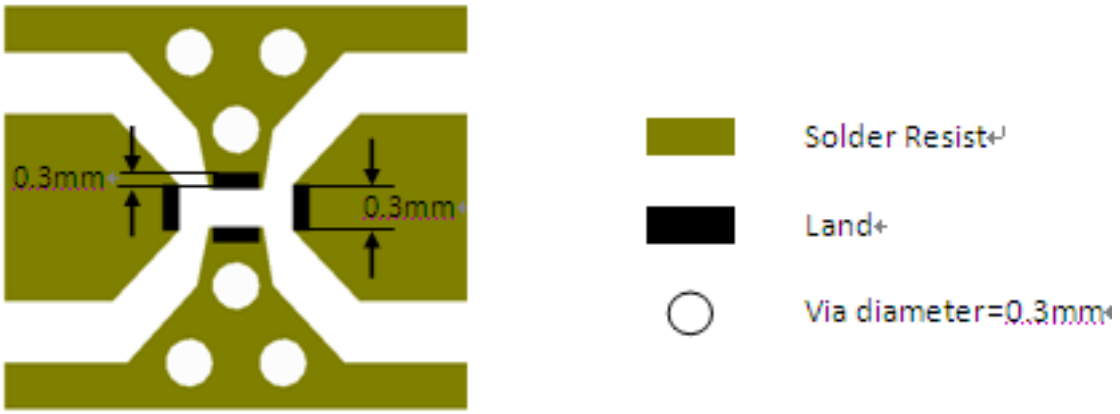


Fig. 1 Antenna outlines

Table 3 Termination configuration

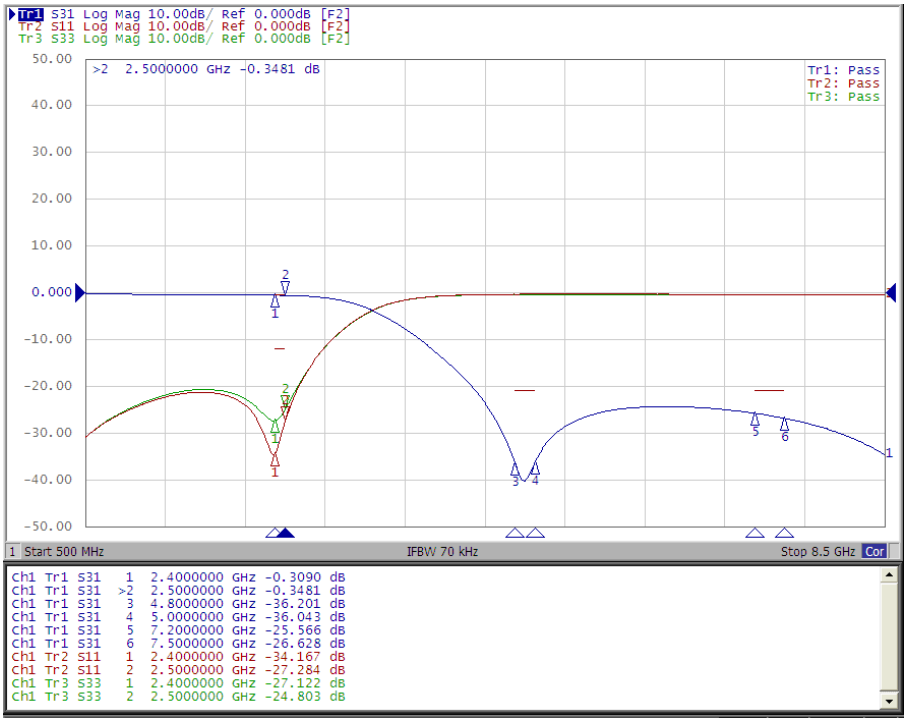
TERMINAL NAME	FUNCTION
P1	Input
P2	GND
P3	Output
P4	GND



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

Fig. 2 Reference design of evaluation board

ELECTRICAL PERFORMANCES



- Measured on Agilent E5071C Network Analyzer
- Input port : Port 1 (Return loss : S11)
- Output port : Port 3 (Insertion loss : S31)

Fig. 3 Frequency Characteristics

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Jul.7 , 2016	-	- New data sheet for Low Pass Filter, 2.4 GHz application, 1005 series