Innovative Service Around the Globe YAGEO

# DATA SHEET

## WIRELESS COMPONENTS

**Diplexer**
**DPX2012LL85R2455A**

2.4 AND 5 GHz
**2012 Series**

YAGEO Phycomp

Product Specification – February 18, 2013 V.0

## FEATURES

- Compact size design
- RoHS compliant

## APPLICATIONS

- WLAN, 802.11a/b/g/n
- 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

| DPX | 2012 | LL | 85 | R | 2455A |
|---|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) | (6) |

(1) PRODUCT

DPX = Diplexer

(2) SIZE

2012 = 2.0 × 1.2 mm

(3) MATERIALS

Material Code LL

(4) TYPE

85 = Type 85

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2455 = 2.4/5GHz

PHYCOMP CTC

CFL4111714852524K

12NC

411171485252

## SPECIFICATION

Table 1

| DESCRIPTION | VALUE | |
|---|---|---|
| Pass Band | 2400-2500 MHz | 4900~5950 MHz |
| Insertion Loss | 0.7dB(Max) | 0.9dB(Max) |
| V.S.W.R | 2.0(Max) | 2.0(Max) |
| Attenuation | 20dB min.@4900~5900MHz | 20dB min.@2400~2500MHz |
| Operating Temperature | -40~85℃ | |

## DIMENSIONS

Table 2 Machinical Dimension

| | DIMENSION |
|---|---|
| L (mm) | 2.00 ±0.10 |
| W (mm) | 1.25 ±0.10 |
| T (mm) | 0.85 ±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 |
| P5 (mm) | 0.30 ±0.15 |
| P6 (mm) | 0.30 ±0.15 |
| P7 (mm) | 0.30 ±0.15 |
| P8 (mm) | 0.30 ±0.15 |
| D1 (mm) | 0.20 ±0.10 |
| D2 (mm) | 0.65 ±0.15 |
| D3 (mm) | 0.35 ±0.15 |
| D4 (mm) | 0.30 ±0.15 |

**OUTLINES**

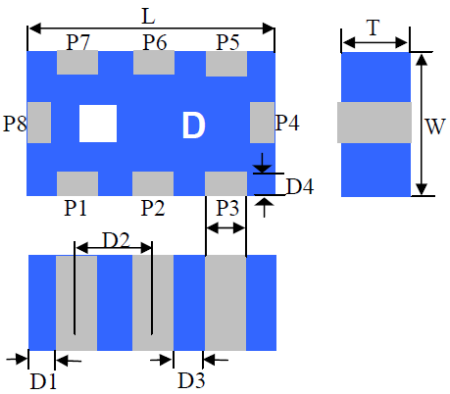



Fig. 1 Filter outlines

Table 3 Termination configuration

| TERMINAL NAME | FUNCTION |
|---|---|
| P1 | Ground Terminal |
| P2 | Common Port |
| P3 | Ground Terminal |
| P4 | High Band Port |
| P5 | Ground Terminal |
| P6 | Ground Terminal |
| P7 | Ground Terminal |
| P8 | Low Band Port |

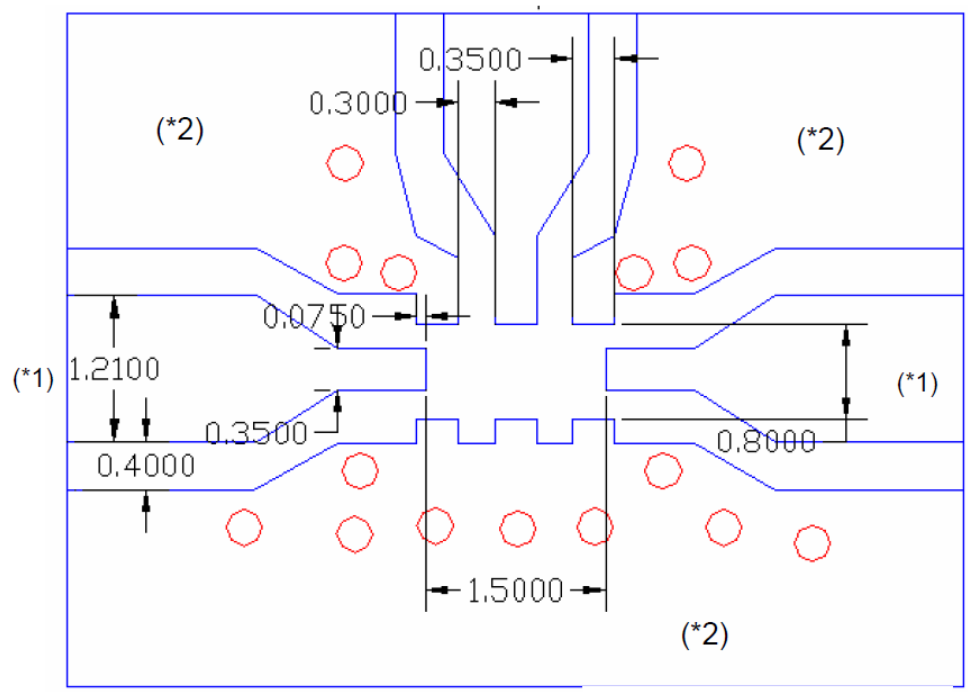
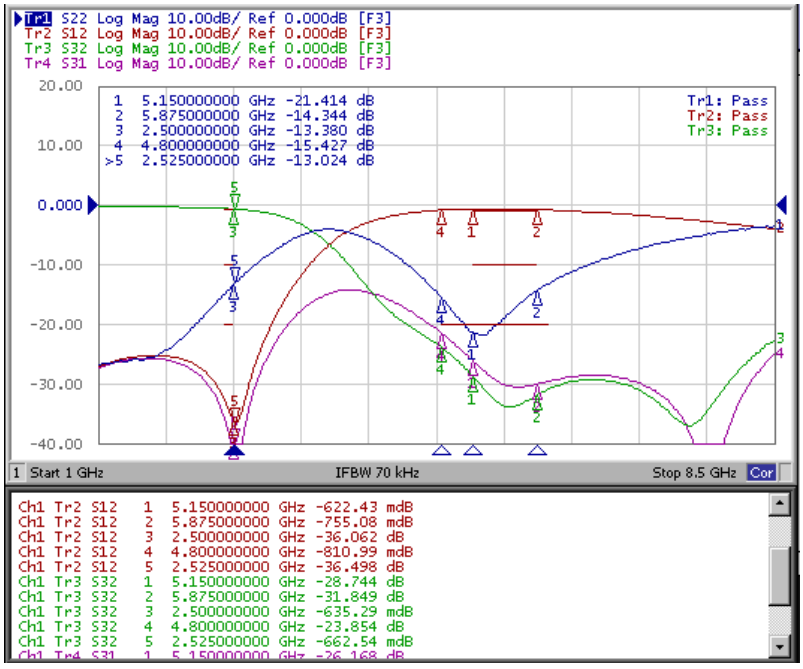



**Fig. 2** Reference design of evaluation board

## ELECTRICAL PERFORMANCES




- Measured on Agilent E5071b Network Analyzer
- Common port: Port 2(Return loss S22)
- Low band port: Port 3(Low band insertion loss S32, and attenuation at high band)
- High band port: Port 1(High band insertion loss S12, and attenuation at low band)

**Fig. 3** Frequency Characteristics

## REVISION HISTORY

| REVISION | DATE | CHANGE NOTIFICATION | DESCRIPTION |
|---|---|---|---|
| Version 0 | Feb. 18, 2013 | - | - New data sheet for Diplexer, 2.45/5 GHz application, 2012 series |