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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



DATA SHEET

WIRELESS COMPONENTS

Diplexer
DPX2012U89R2455A

2.4 AND 5 GHz
2012 Series



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 89 R 2455A
(1) (2) (3) (4) (5) (6)

(1) PRODUCT

DPX = Diplexer

(2) SIZE

2012 = 2.0 × 1.2

(3) MATERIALS

Material Code LL

(4) TYPE

89 = Type 89

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2455 = 2.4/5GHz

PHYCOMP CTC

CFL4111714892524K

I2NC

411171489252

SPECIFICATION

Table 1

| DESCRIPTION | VALUE | |
|-----------------------|--|---|
| Pass Band | 2400~2500 MHz | 4900~5950 MHz |
| Insertion Loss | 0.5dB(Max) | 0.65dB(Max) |
| V.S.W.R | 2.0 (Max) | 2.0 (Max) |
| Return-Loss | 10.0 dB (Min) | 10.0 dB (Min) |
| Attenuation | 20.0dB min.@4.8~5.0GHz 20.0dB min.@7.2~7.5GHz | 20.0dB min.@0.824~0.915GHz 20.0dB min.@1.8~2.5GHz 10.0dB Ref.@9.8~11.9GHz |
| Isolation | 20 dB (Min) | 20 dB (Min) |
| Operating Temperature | -40~85 °C | -40~85°C |

DIMENSIONS

Table 2 Machinical Dimension

| | DIMENSION |
|---------|------------|
| L (mm) | 2.00 ±0.15 |
| W (mm) | 1.25 ±0.15 |
| T (mm) | 0.50 ±0.10 |
| P1 (mm) | 0.40 ±0.15 |
| P2 (mm) | 0.40 ±0.15 |
| P3 (mm) | 0.40 ±0.15 |
| P4 (mm) | 0.40 ±0.15 |
| P5 (mm) | 0.40 ±0.15 |
| P6 (mm) | 0.40 ±0.15 |
| D1 (mm) | 0.15 ±0.10 |
| D2 (mm) | 0.25 ±0.10 |
| D3 (mm) | 0.20 ±0.10 |

OUTLINES

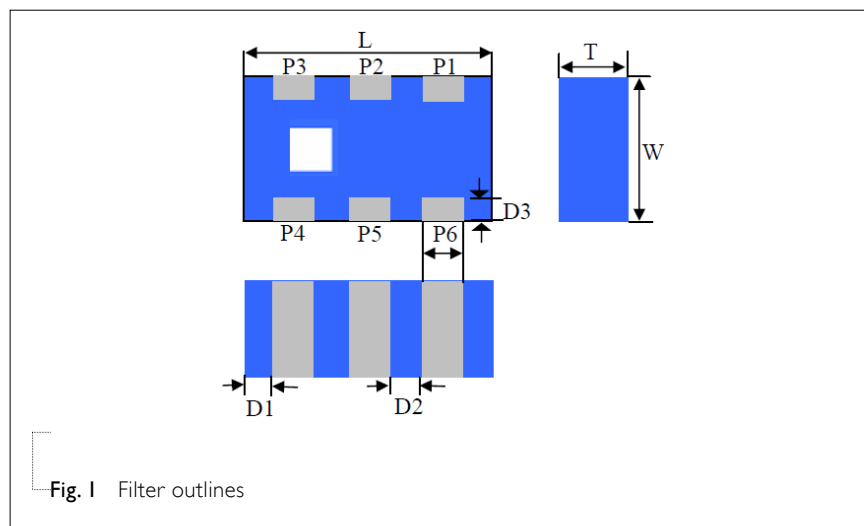


Table 3 Termination configuration

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

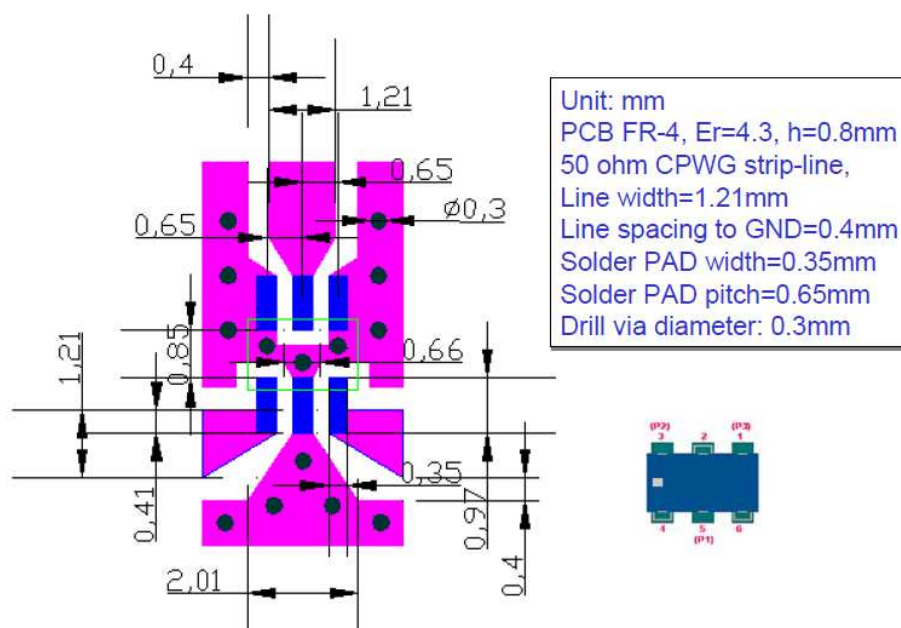


Fig. 2 Reference design of evaluation board

ELECTRICAL PERFORMANCES

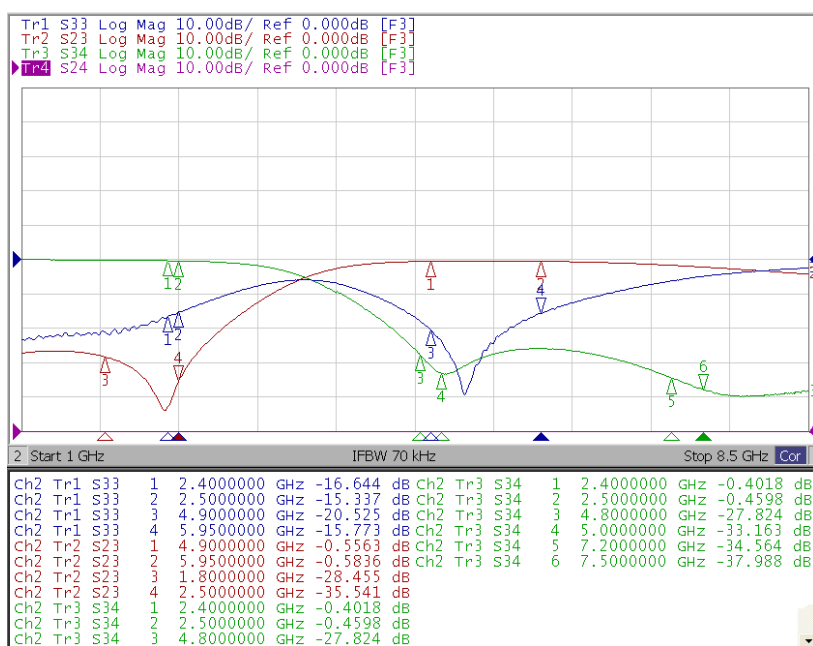


Fig. 3 Frequency Characteristics

- Measured on Agilent E5071C Network Analyzer
- Common port: Port 3 (Return loss S33)
- Low band port: Port 4 (Low band insertion loss S34, and attenuation at high band)
- High band port: Port 2 (High band insertion loss S23, and attenuation at low band)

REVISION HISTORY

| REVISION | DATE | CHANGE NOTIFICATION | DESCRIPTION |
|-----------|---------------|---------------------|--|
| Version 0 | Feb. 01, 2013 | - | - New data sheet for Diplexer, 2.45/5 GHz application, 2012 series |