

DATA SHEET

WIRELESS COMPONENTS

Diplexer
DPX2012LL89F2455A

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

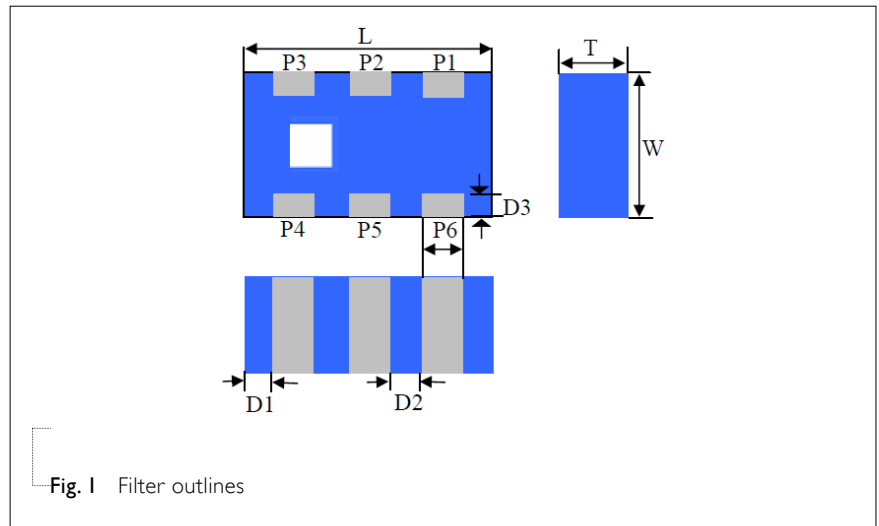


Table 3 Termination configuration

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

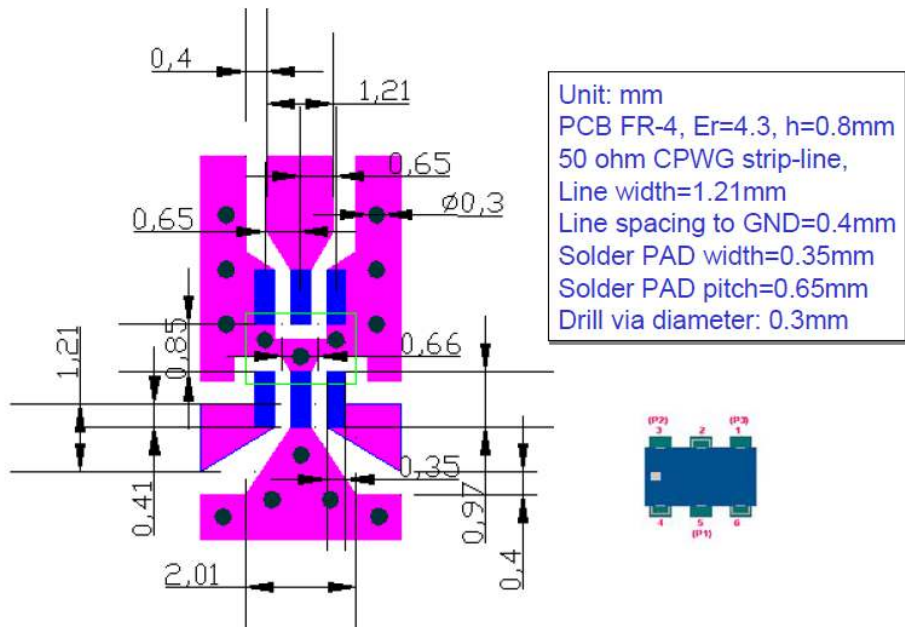
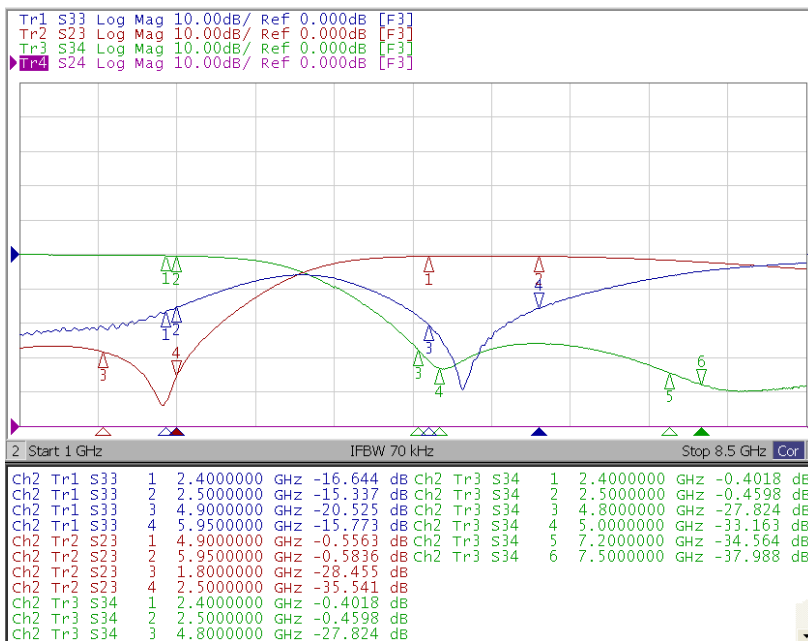


Fig. 2 Reference design of evaluation board

ELECTRICAL PERFORMANCES



- 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)

Fig. 3 Frequency Characteristics

REVISION HISTORY

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