

# DATA SHEET

## WIRELESS COMPONENTS

Diplexer  
DPX2012LL75R2455A

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 75 R 2455A**  
 (1) (2) (3) (4) (5) (6)

---

**(1) PRODUCT**

DPX = Diplexer

---

**(2) SIZE**

2012 = 2.0x 1.2 mm

---

**(3) MATERIALS**

Material Code LL

---

**(4) TYPE**

75 = Type 75

---

**(5) PACKING STYLE**

R = Tape and Reel

---

**(6) WORKING FREQUENCY**

2455 = 2.4/5GHz

---

**PHYCOMP CTC**

CFL4111714752524K

---

**I2NC**

411171475252

---

**SPECIFICATION**

Table 1

DESCRIPTION	VALUE	
	Low Band	High Band
Pass Band	2400~2500MHz	4900~5950MHz
Insertion loss	0.65dB (Max)	0.65dB (Max)
V.S.W.R /Return-Loss	2.0(Max) /10.0dB(Min)	2.0(Max) /10.0dB(Min)
Attenuation	20dB(Min).@4800~5000MHz 20dB(Min).@7200~7500MHz	20dB (Min).@824~915 MHz 20dB (Min).@1800~2500 MHz 15dB (Min).@9800~11900 MHz
Operating Temperature	-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±0.15
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)	0.20±0.15
D2 (mm)	0.20±0.15
D3 (mm)	0.25±0.15

**OUTLINES**

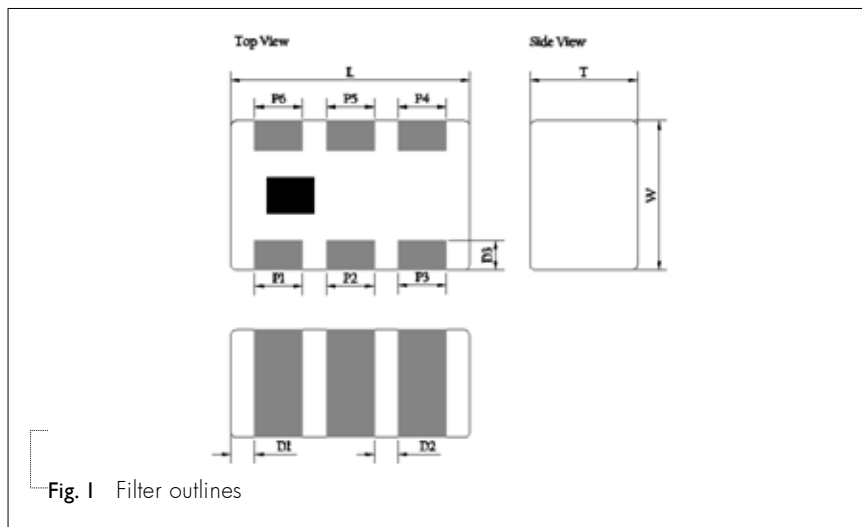
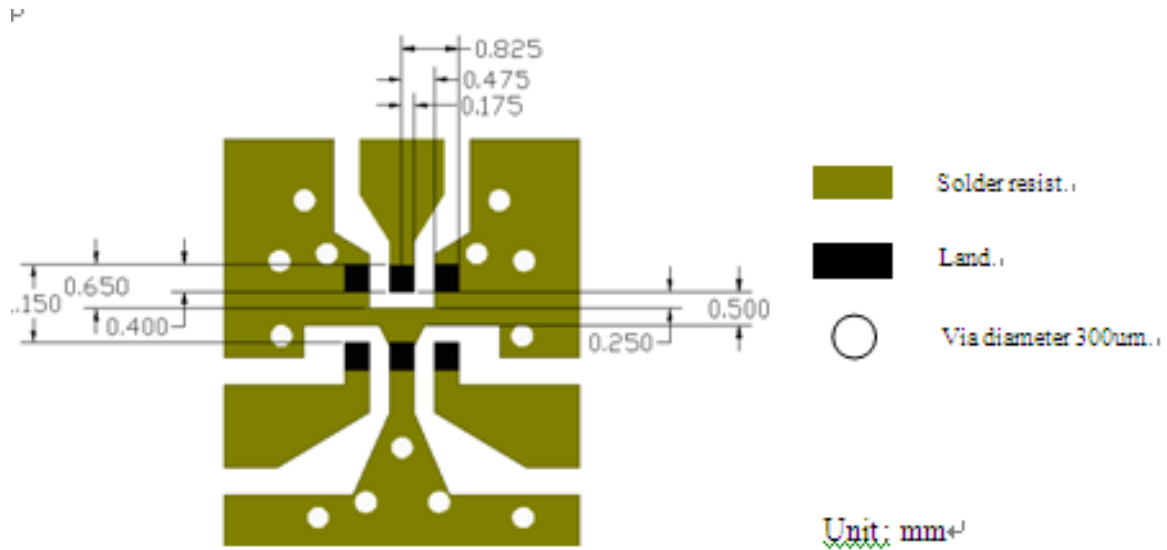


Table 3 Termination configuration

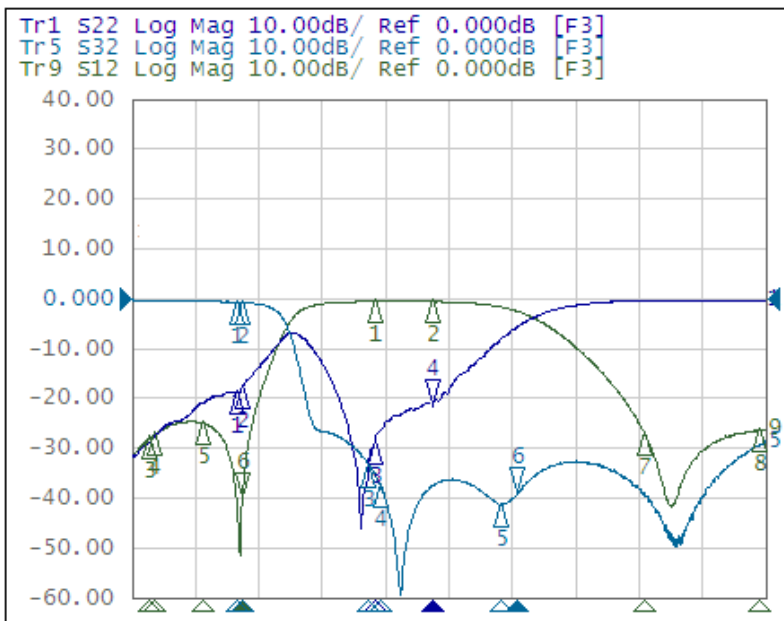
TERMINAL NAME	FUNCTION
P1	GND
P2	Common
P3	GND
P4	Low band
P5	GND
P6	High band



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
- 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	Jul. 6, 2016	-	- New data sheet of Diplexer
-----------	--------------	---	------------------------------