

# DATA SHEET

## WIRELESS COMPONENTS

Diplexer  
DPX2012LL76R2455A

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

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**(1) PRODUCT**

DPX = Diplexer

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**(2) SIZE**

2012 = 2.0x 1.2 mm

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**(3) MATERIALS**

Material Code LL

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**(4) TYPE**

76 = Type 76

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**(5) PACKING STYLE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

2455 = 2.4/5GHz

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**PHYCOMP CTC**

CFL4111714762524K

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**I2NC**

411171476252

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**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**

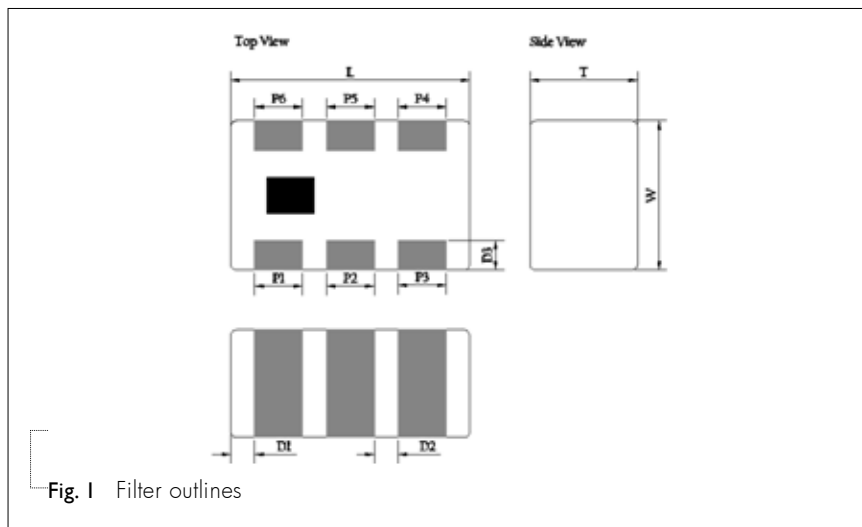
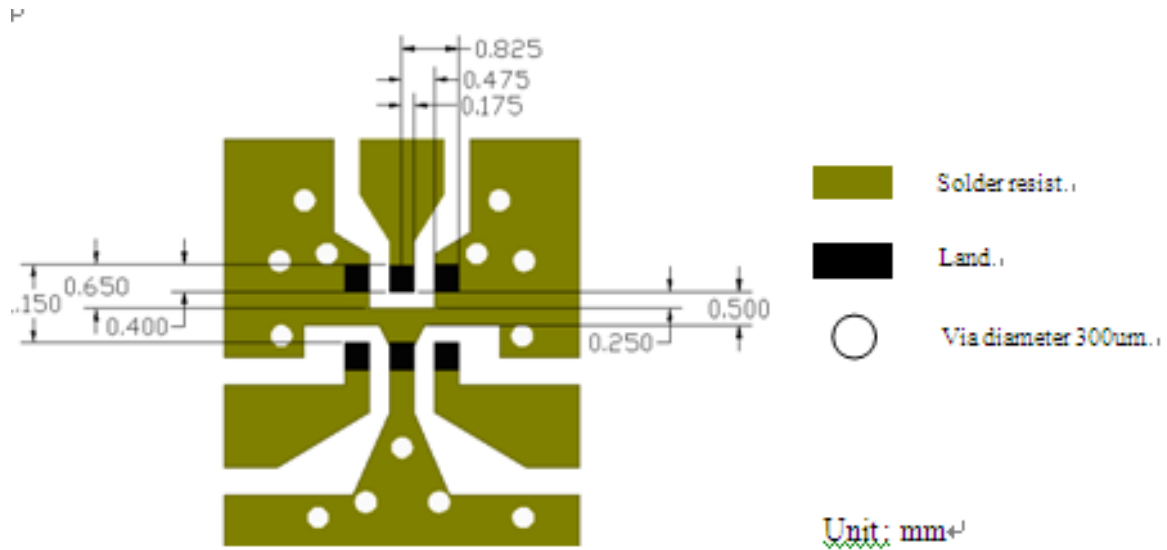


Table 3 Termination configuration

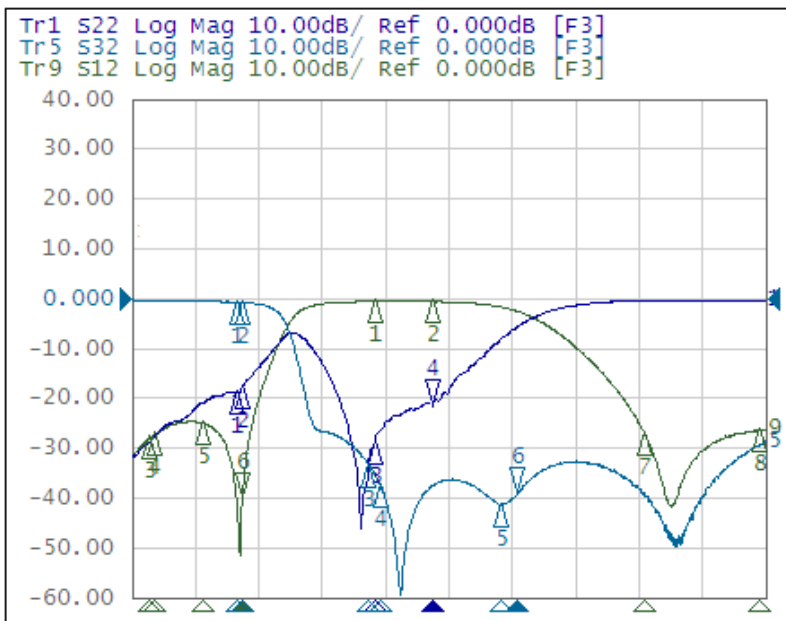
TERMINAL NAME	FUNCTION
P1	GND
P2	Common
P3	GND
P4	High band
P5	GND
P6	Low band



Line width should be designed to match 50 $\Omega$  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
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Version 0	Jul. 6, 2016	-	- New data sheet of Diplexer
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