

DATA SHEET

WIRELESS COMPONENTS

Diplexer
DPX1608LL87R1524A
1.5 AND 2.4 GHZ
1608 Series



FEATURES

- Compact size design
- RoHS compliant

APPLICATIONS

- WLAN, 802.11a/b/g/n
- ISM Band
- GPS

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

PART NUMBER

DPX 1608 LL 87 R 1524A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

DPX = Diplexer

(2) SIZE

1608 = 1.6 × 0.8 mm

(3) MATERIALS

Material Code LL

(4) TYPE

87= Type 87

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

1524 = 1.575/2.4GHz

PHYCOMP CTC

CFL4111715871524K

I2NC

411171587152

SPECIFICATION

Table 1

DESCRIPTION	VALUE		
	Low Band	High Band	
Pass Band	1570-1610 MHz	2400-2500 MHz	4900-6000 MHz
Insertion Loss	0.5dB(Typ)	0.5dB(Typ)	0.4dB(Typ)
	0.6dB(Max)	0.7dB(Max)	0.6dB(Max)
V.S.W.R / Return-Loss	2.0 (Max) / 10.0 dB (Min)	2.0 (Max) / 10.0 dB (Min)	2.0 (Max) / 10.0 dB (Min)
Attenuation	15dB (Min).@2.4~2.5GHz	15dB (Min).@1.57~1.61 GHz	
	15dB (Min).@4.9~6.0GHz		
Isolation	20 dB (Min)		
Operating Temperature	-40~+85°C		

DIMENSIONS

Table 2 Machinical Dimension

	DIMENSION
L (mm)	1.60 ± 0.10
W (mm)	0.80 ± 0.10
T (mm)	0.60 ± 0.10
P1 (mm)	0.20 ± 0.15
P2 (mm)	0.20 ± 0.15
P3 (mm)	0.20 ± 0.15
P4 (mm)	0.20 ± 0.15
P5 (mm)	0.20 ± 0.15
P6 (mm)	0.20 ± 0.15
D1 (mm)	0.20 ± 0.15
D2 (mm)	0.30 ± 0.10
D3 (mm)	0.15 ± 0.10

OUTLINES

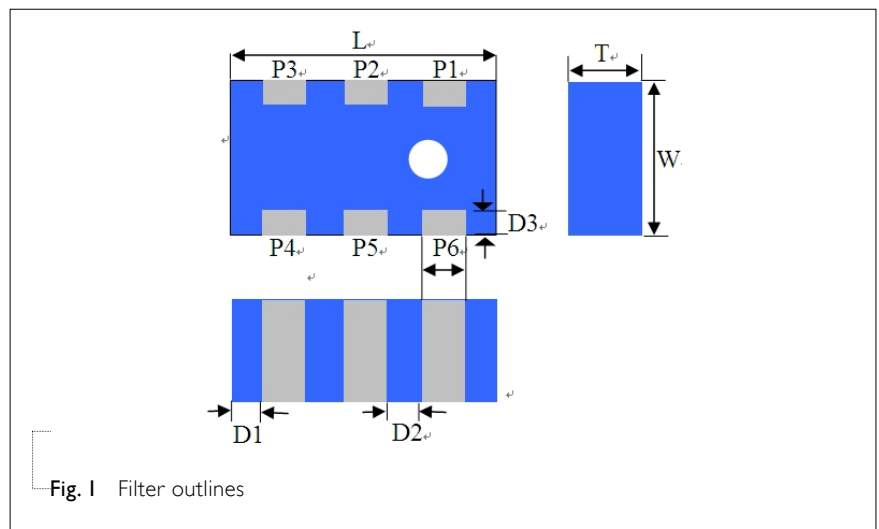


Fig. 1 Filter outlines

Table 3 Termination configuration

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

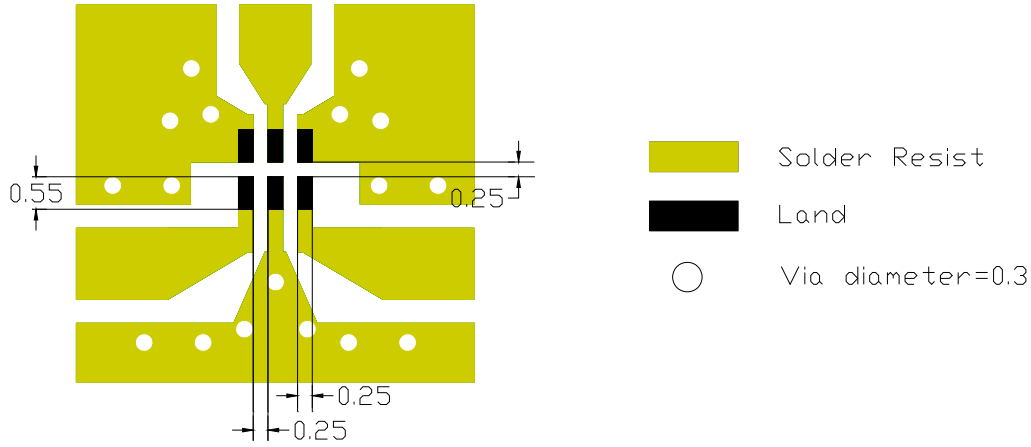
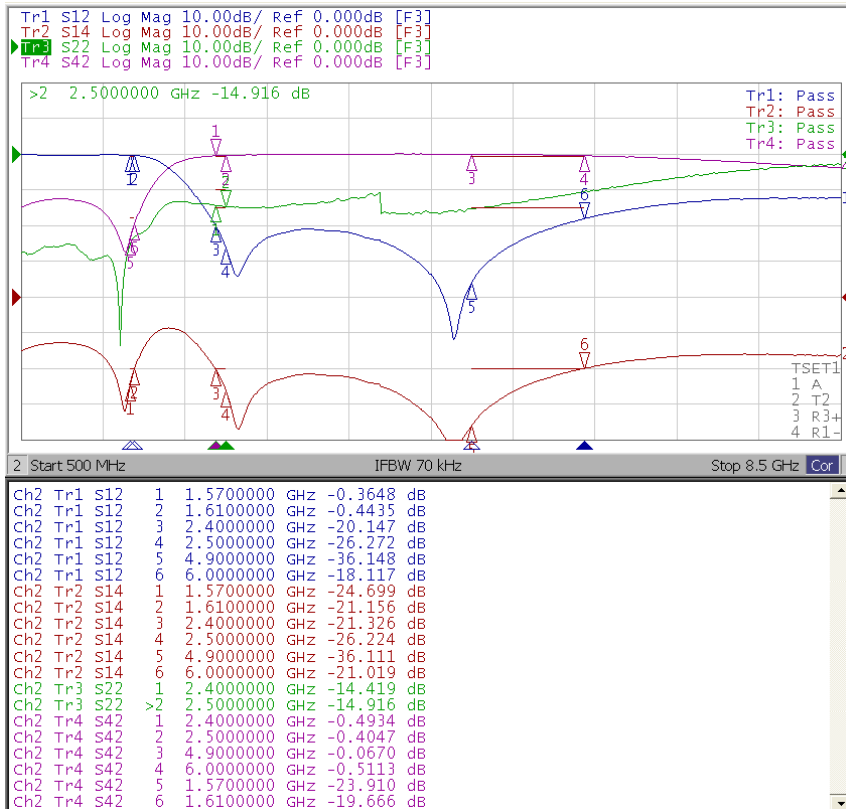


Fig. 2 Reference design of evaluation board

ELECTRICAL PERFORMANCES



- Measured on Agilent E5071C Network Analyzer
- Common port: Port 2 (Return loss S22)
- Low band port: Port 1 (Low band insertion loss S12, and attenuation at high band)
- High band port: Port 4 (High band insertion loss S42, and attenuation at low band)

Fig. 3 Frequency Characteristics

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	May 15 2013	-	- New data sheet for Diplexer, 1.575/2.4 GHz application, I608 Series