

# DATA SHEET

## WIRELESS COMPONENTS

Diplexer  
DPX1608LL85R2455A

2.4 AND 5 GHZ  
I608 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 1608 LL 85 R 2455A**  
 (1) (2) (3) (4) (5) (6)

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(1) PRODUCT

DPX = Diplexer

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(2) SIZE

1608 = 1.6 × 0.8 mm

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(3) MATERIALS

Material Code LL

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(4) TYPE

85 = Type 85

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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

CFL4111715852524K

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I2NC

411171585252

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**SPECIFICATION**

Table 1

DESCRIPTION	VALUE	
Pass Band	Low Band	High Band
	2400~2500MHz	4900~6000MHz
Insertion loss	0.7dB (Max) at 25°C	0.8dB (Max) at 25°C
Return-Loss	10.0dB(Min)	12.0dB(Min)
Attenuation	20dB(Min).@4.8~5GHz 20dB(Min).@7.2~7.5GHz	28dB(Min).@860~960MHz 23dB(Min).@1545~1605MHz 23dB(Min).@1710~1990GHz 28dB(Min).@2.17GHz 8dB(Min).@8.1GHz 15dB(Min).@8.82~9.8GHz 27dB(Min).@9.8~11.8GHz
Isolation	Middle Band to High Band: 20dB (Min). @4.9~5.95GHz	
Operating Temperature	-40 ~ 85°C	
Dimension	1.6 x 0.8 x0.6mm	

**DIMENSIONS**

Table 2 Machinical Dimension

	DIMENSION
L (mm)	1.60±0.15
W (mm)	0.80±0.15
T (mm)	0.60±0.15
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**

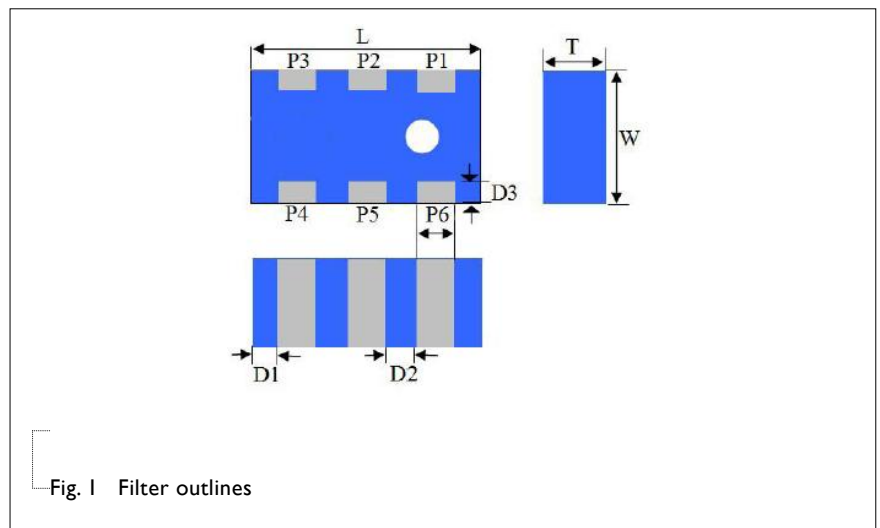


Table 3 Termination configuration

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

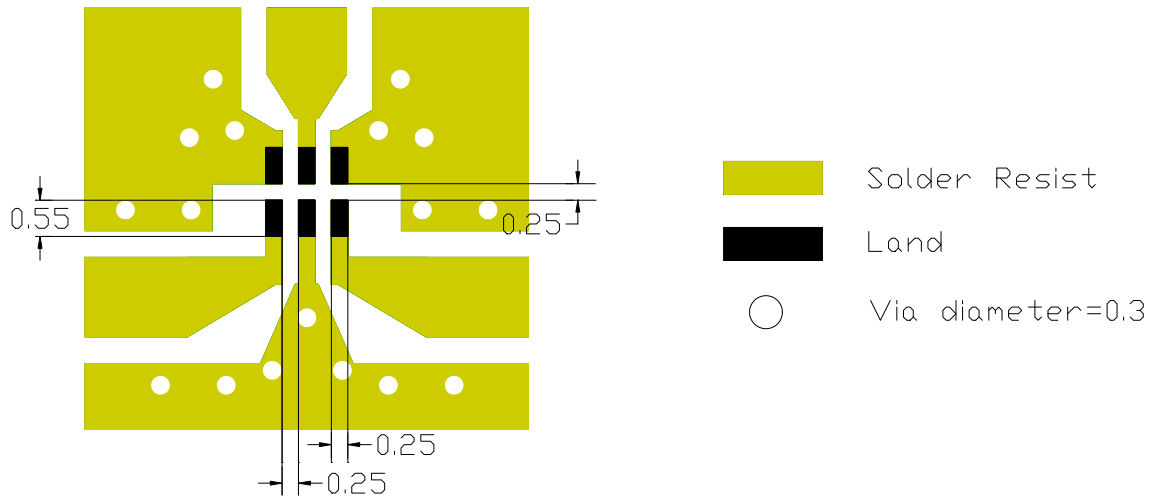
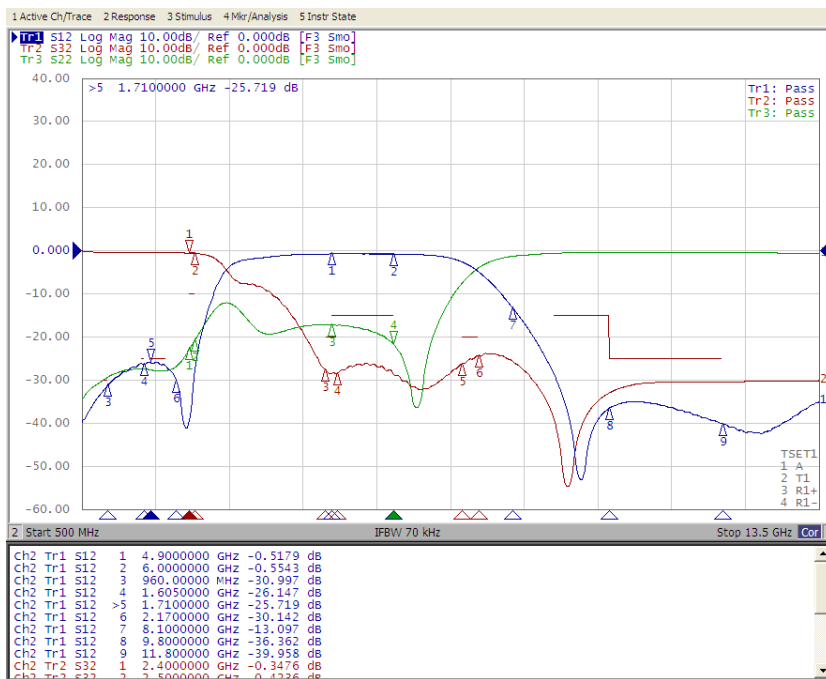


Fig.2 Reference design of evaluation board

**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 3	May 11, 2018	-	- Update termination function
Version 2	Aug. 18, 2014	-	- Update specification
Version 1	Aug. 05, 2014	-	- Update Attenuation