

# DATA SHEET

## WIRELESS COMPONENTS

Diplexer  
DPX1608LL65R2455A

2.4 GHz / 5 GHz  
1608 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 65 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**

65 = Type 65

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**(5) PACKING STYLE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

2455 = 2.4 / 5 GHz

**SPECIFICATION**

Table 1

DESCRIPTION	VALUE	
	Low Band	High Band
Pass Band	2400~2500MHz	4900~6000MHz
Insertion Loss (Max)	0.50dB	0.75dB
Return Loss (Min)	12dB	12dB
Attenuation (Min)	30dB@4800~5000MHz 32dB@7200~7500MHz	27dB@2400~2500MHz 27dB@10300~11700MHz 20dB@15450~16200MHz
Isolation (Min)	32dB@2400~2500MHz 32dB@4800~5950MHz	
Operating Temperature	-40 ~ 85°C	

**DIMENSIONS**

Table 2 Mechanical Dimension

	DIMENSION
L (mm)	1.60±0.15
W (mm)	0.80±0.15
T (mm)	0.60±0.15
D1 (mm)	0.25±0.10
D2 (mm)	0.125±0.10
D3 (mm)	0.30±0.10
D4 (mm)	0.55±0.10
E1 (mm)	0.15±0.10

**OUTLINES**

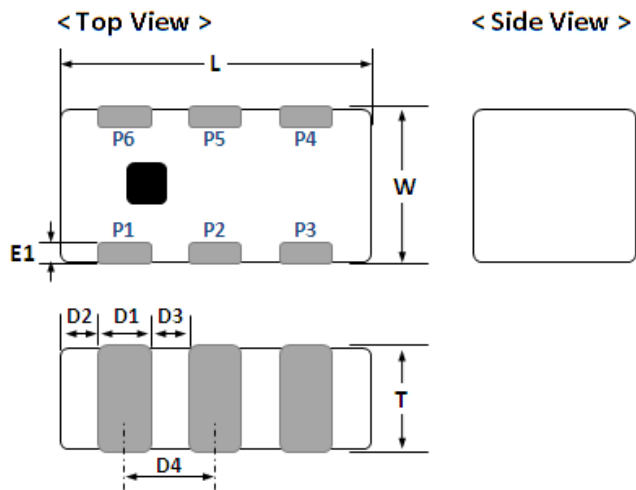
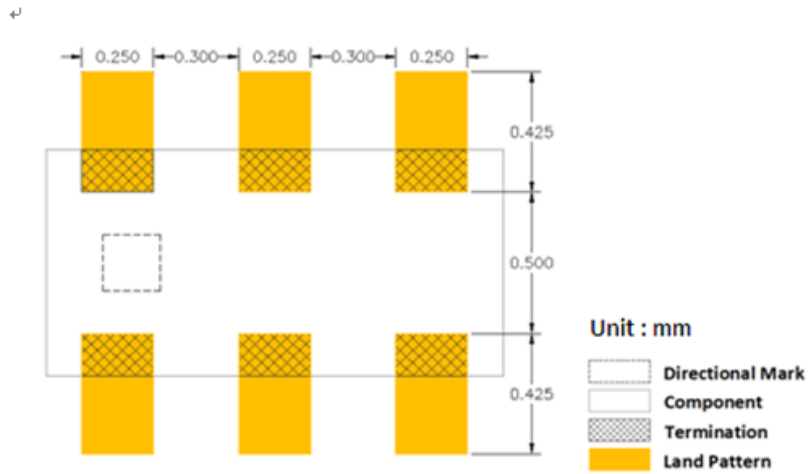


Fig. 1 Filter outlines

Table 3 Termination configuration

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

**Recommended Land Pattern**



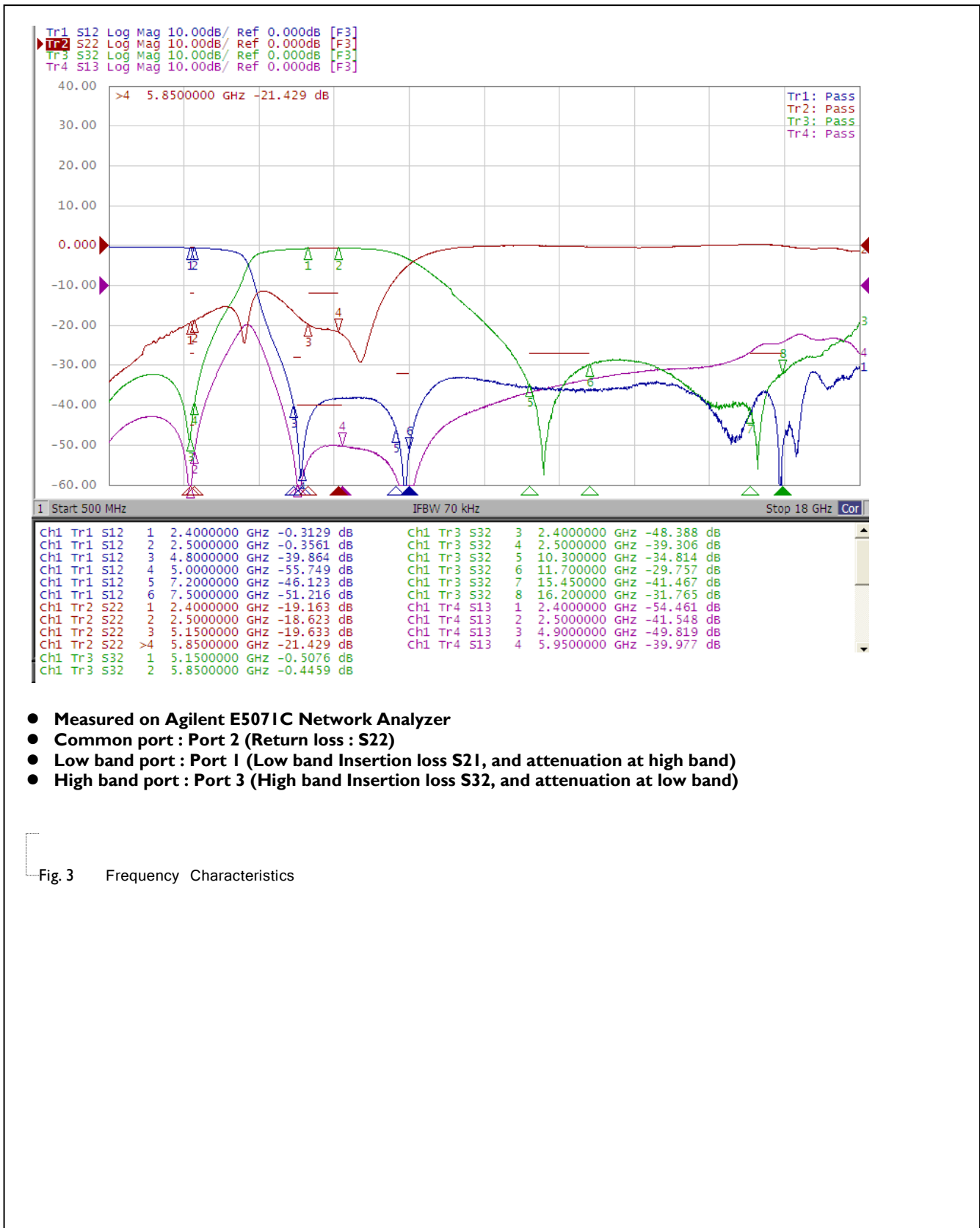
**Recommended PCB Pattern**



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 1 (Low band Insertion loss S21, and attenuation at high band)
- High band port : Port 3 (High band Insertion loss S32, and attenuation at low band)

Fig. 3 Frequency Characteristics

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
V2.0	Feb. 27,2020		- New data sheet for Diplexer, 2.4/5 GHz application, 1608 series refer to RDV2.0

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