

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)

(1) PRODUCT

DPX = Diplexer

(2) SIZE

1608 = 1.6 × 0.8 mm

(3) MATERIALS

Material Code LL

(4) TYPE

65 = Type 65

(5) PACKING STYLE

R = Tape and Reel

(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

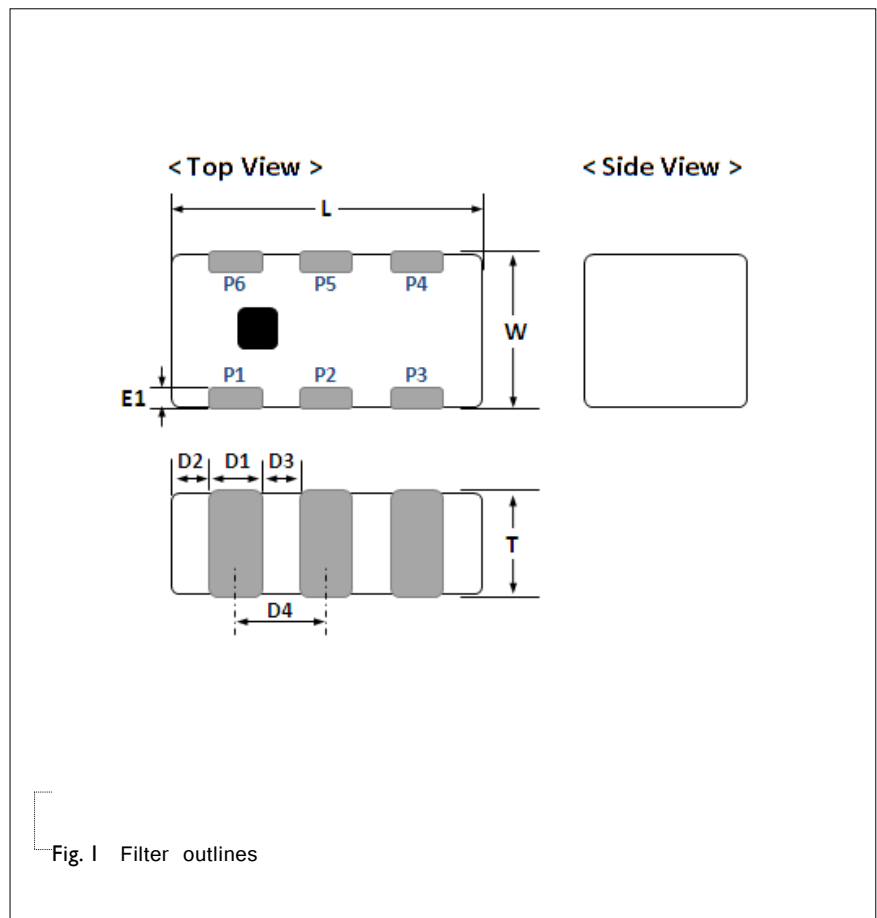
Table 2 Mechanical Dimension

	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

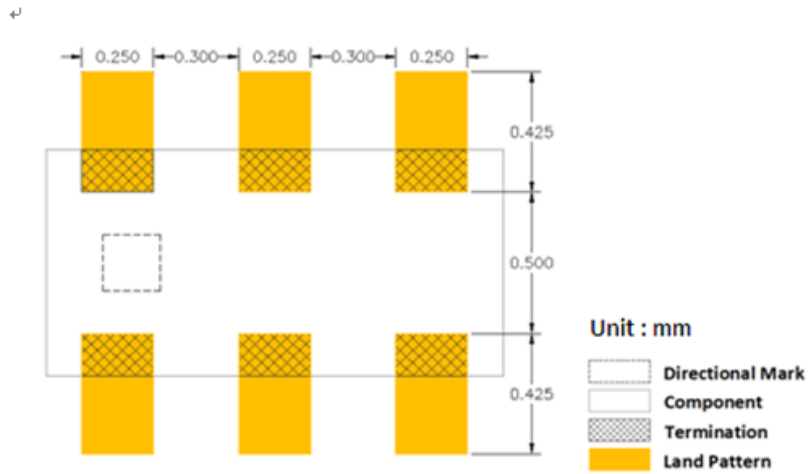
Table 3 Termination configuration

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

OUTLINES



Recommended Land Pattern



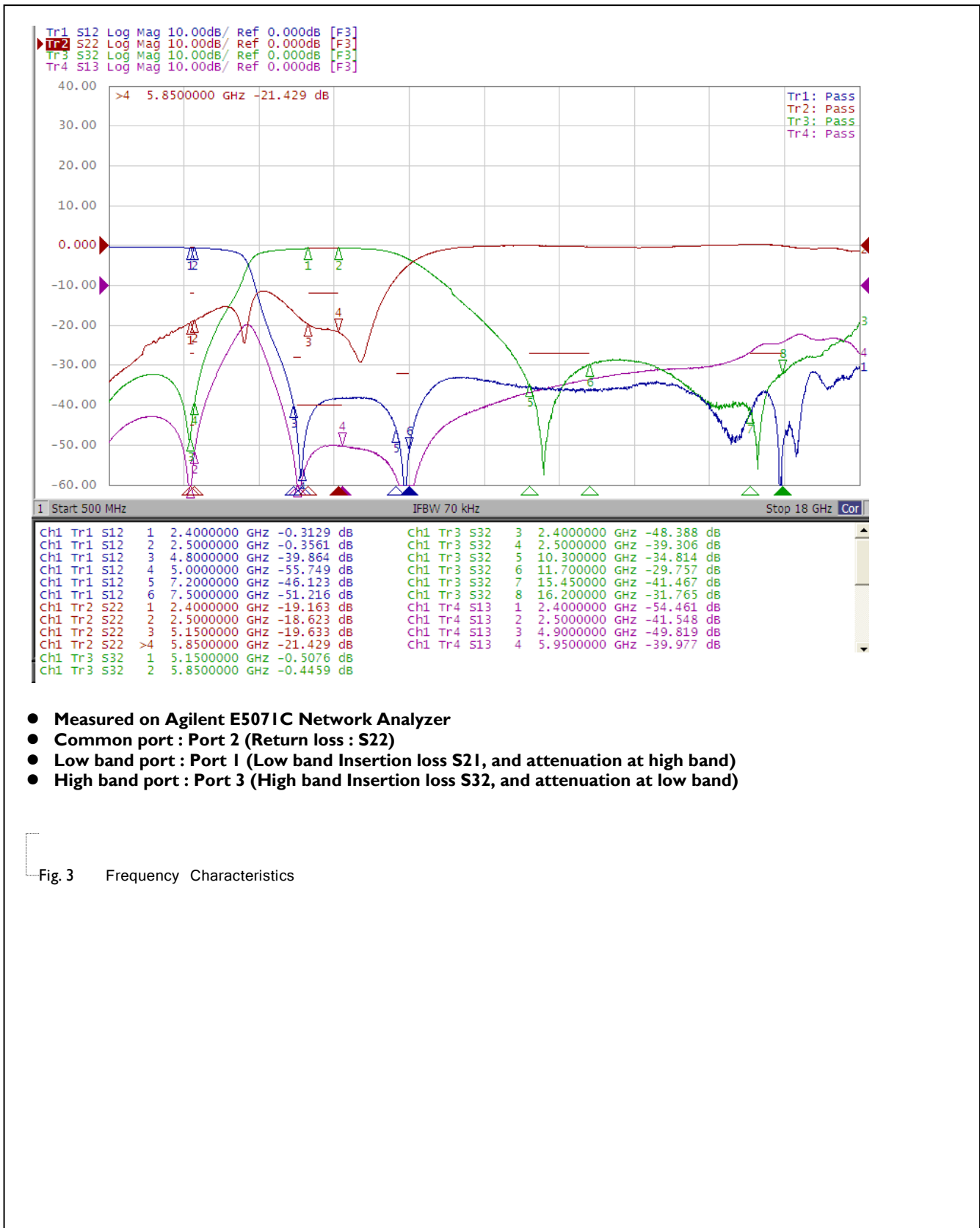
Recommended PCB Pattern



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