Pulse A YAGEO Company | LARSEN Antennas

TECHNICAL DATA SHEET

Description: 1608 2.4G&5GHz Diplexer

PART NUMBER: DPX1608LL80R2455A

Features:

- Compact size : 1.6x0.8x0.6mm
- RoHS compliant

Applications:

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

ELECTRICAL SPECIFICATIONS

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℃	
Dimension	1.6 x 0.8 x0.6mm	

RoHS COMPLIANT

Pulse Worldwide Headquarters
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Pulse GmbH & Do, KG
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Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

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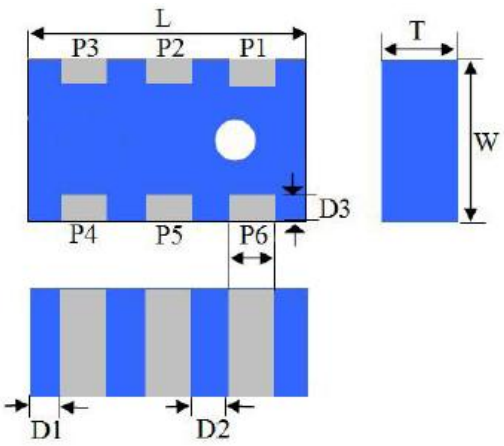
MECHANICAL DIMENSION

Outline



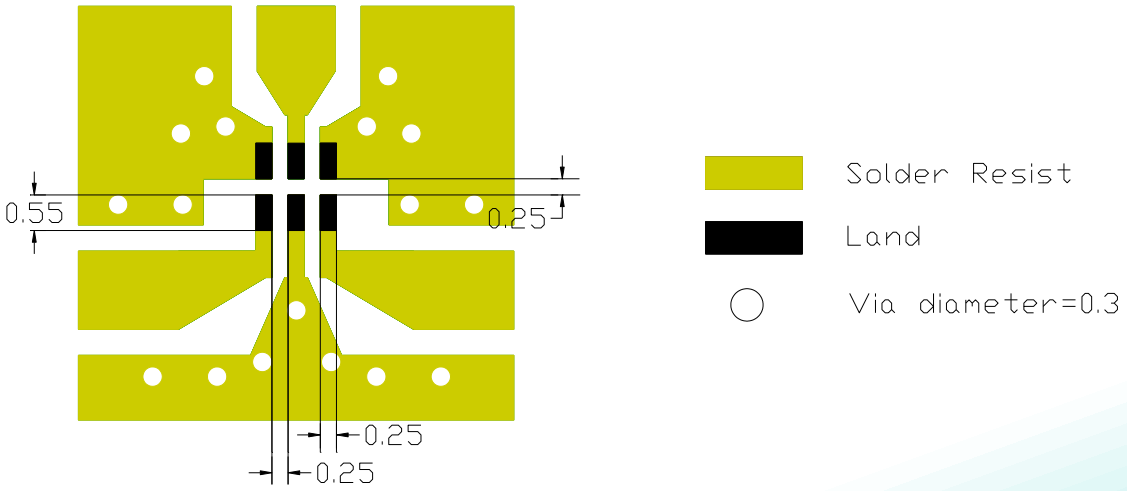
Termination

Terminal name	Function
P1	Low band
P2	GND
P3	High band
P4	GND
P5	Common
P6	GND

Mechanical

	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

Reference design of EVB



Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

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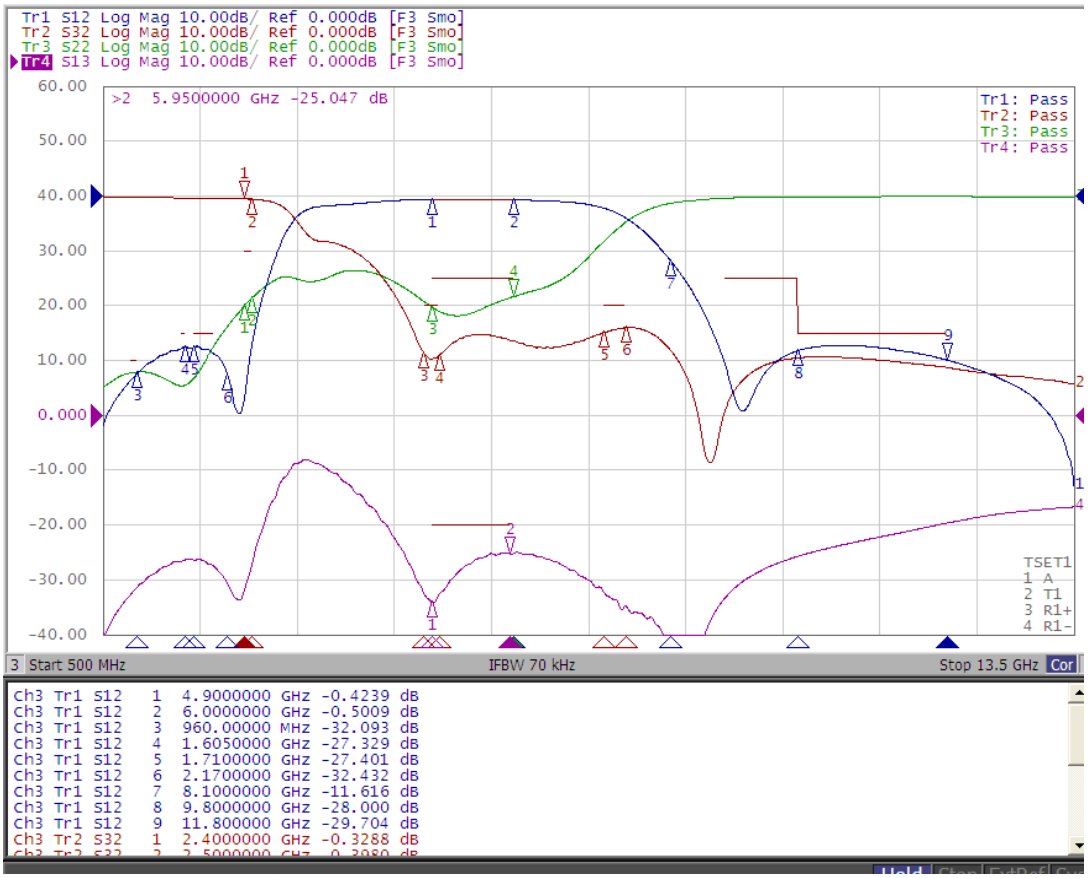
ELECTRICAL PERFORMANCES



- Measured on Agilent E5071C Network Analyzer
- Port 1, 2 and 3 in Network Analyzer is connected to device as below
  - ◆ Port 1 : High band port
  - ◆ Port 2 : Common port
  - ◆ Port 3 : Low band port
  - ◆S22 : Return loss for low and high band
  - ◆ S32 : Insertion loss and attenuation for low band
  - ◆ S12 : Insertion loss and attenuation for high band

Frequency Characteristics

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REVISION HISTORY

Revision	Date	Description
Version 1	Oct. 06, 2020	- New issue

RoHS COMPLIANT