

**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		28dB(Min).@860~960MHz	
		23dB(Min).@1545~1605MHz	
	20dB(Min).@4.8~5GHz 20dB(Min).@7.2~7.5GHz	23dB(Min).@1710~1990GHz	
		28dB(Min).@2.17GHz	
	200B(Will).@1.2 1.30H2	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		

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION



This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden. For more information:

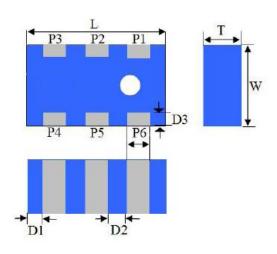


**Description**: 1608 2.4G&5GHz Diplexer

PART NUMBER: DPX1608LL80R2455A

### **MECHANICAL DIMENSION**

## **Outline**



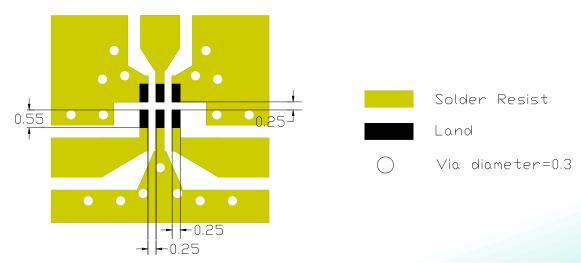
## **Termination**

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  $50\Omega$  characteristic impedance, depending on PCB material and thickness.

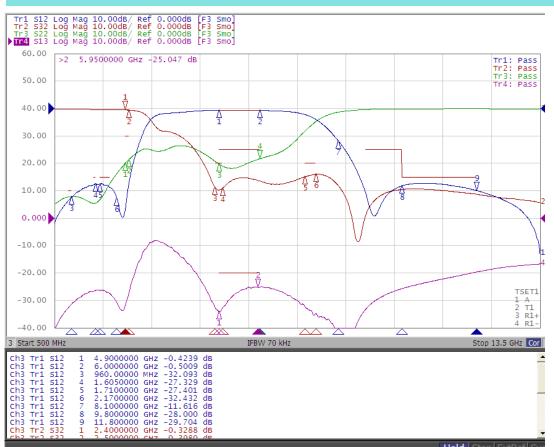




**Description**: 1608 2.4G&5GHz Diplexer

PART NUMBER: DPX1608LL80R2455A

#### **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



**Description**: 1608 2.4G&5GHz Diplexer

PART NUMBER: DPX1608LL80R2455A

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