

Description: 1608 Diplexer

PART NUMBER: DPX1608LKFBP2460A  
(Preliminary)

**Features:**

- Compact Size
- Low loss
- High Soldering Heat Resistance

**Applications:**

- WLAN

**ELECTRICAL SPECIFICATIONS**

**Low-Band**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion loss (dB)	2400~2500	-	0.62	0.8
Return loss (dB)	2400~2500	10	19.7	-
Attenuation (dB)	30~1000	8	13.1	-
	4800~7125	33	38.5	-
	7200~7500	33	39.3	-
	7700~7950	33	47.2	-
	7500~12000	15	24.8	-

**High-Band**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion loss (dB)	5150~7125	-	0.92	1.2
Return loss (dB)	5150~7125	10	-	-
Attenuation (dB)	100~1000	35	60.6	-
	1000~2300	35	47.3	-
	2400~2500	35	47.6	-
	2700~3500	20	26.6	-
	10300~14250	20	28.3	-
	14700~20000	10	16.1	-

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:

Pulse Worldwide Headquarters  
15255 Innovation Drive #100  
San Diego, CA 92128  
USA  
Tel:1-858-674-8100

Pulse/Larsen Antennas  
18110 SE 34<sup>th</sup> St Bldg 2 Suite 250  
Vancouver, WA 98683  
USA  
Tel: 1-360-944-7551

Europe Headquarters  
Pulse GmbH & Do, KG  
Zeppelinstrasse 15  
Herrenberg, Germany  
Tel: 49 7032 7806 0

Pulse (Suzhou) Wireless Products Co, Inc.  
99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase  
Suzhou New District  
Jiangsu Province, Suzhou 215009 PR China  
Tel: 86 512 6807 9998



Description: 1608 Diplexer

PART NUMBER: DPX1608LKFB2460A  
(Preliminary)

**ELECTRICAL SPECIFICATIONS**

**Common**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Return loss (dB)	2400~2500	10	21.6	-
	5150~7125	10	-	-

**Isolation**

Item	Frequency Range (MHz)	Min.	Typ.	Max.
HB to LB (dB)	2400~2500	35	46.6	-
	4800~7125	33	40.0	-
	10300~14250	-	28.5	-
	15450~20000	-	19.7	-

\*Impedance for high-band = Match to client's chipset

Operating Temperature Range : -40~85°C

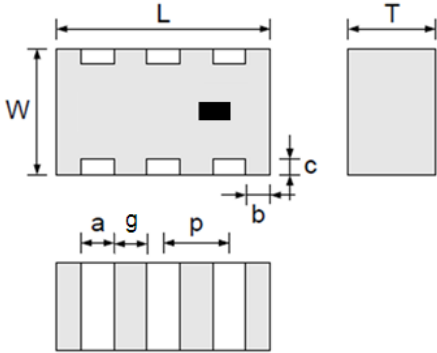
Power Capacity : 3W max.

Description: 1608 Diplexer

PART NUMBER: DPX1608LKFBR2460A  
(Preliminary)

**MECHANICAL DIMENSION**

**Outline**



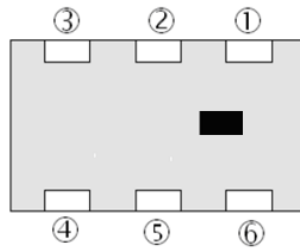
**Dimension**

L	W	T	a
1.60±0.10	0.80±0.10	0.70 max.	0.20±0.10
b	c	g	p
0.20±0.15	0.15±0.10	0.30±0.10	0.50±0.05

NOTE : Dimensions in mm.

**Termination**

Top View

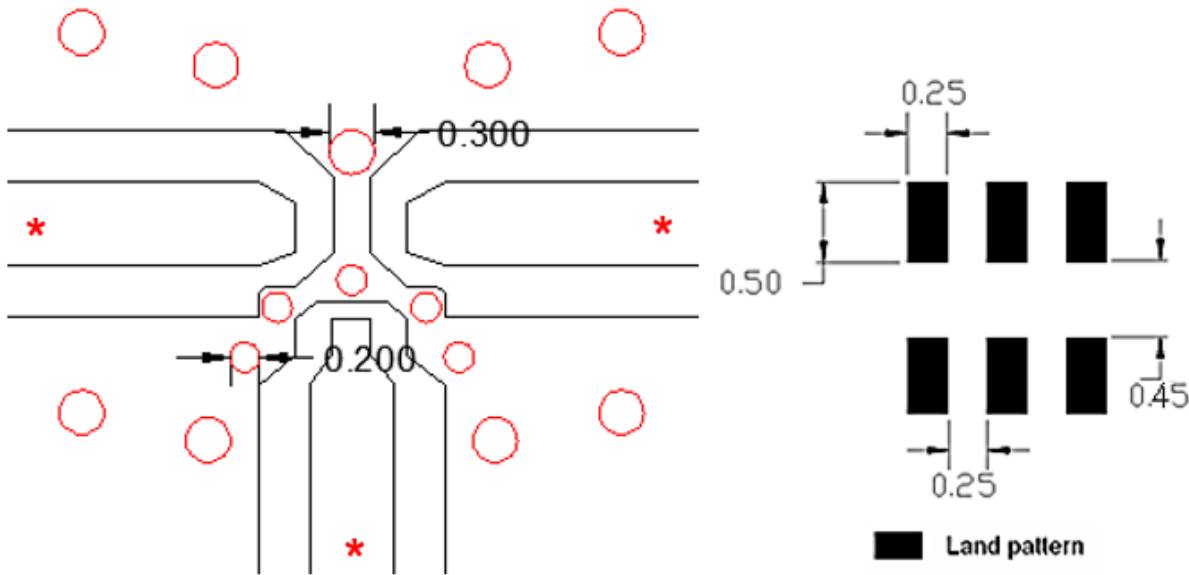


**Terminal name**

**Function**

Terminal name	Function
1	Low band
2	GND
3	High band
4	GND
5	Common
6	GND

**Reference design of EVB**



Unit : mm

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

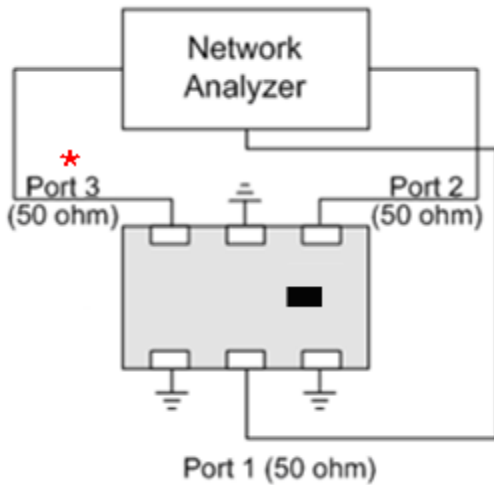
In the effort to improve our products, we reserve the right to make changes judged to be necessary.  
CONFIDENTIAL AND PROPRIETARY INFORMATION

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.

Description: 1608 Diplexer

PART NUMBER: DPX1608LKFB2460A  
(Preliminary)

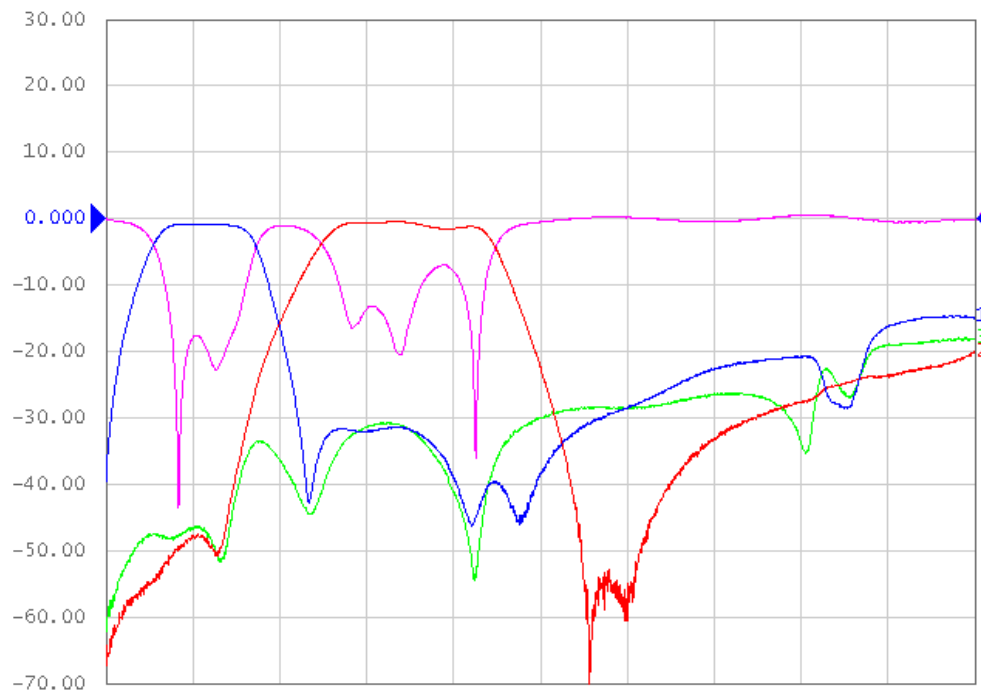
MEASURING DIAGRAM



Test Instrument :  
Agilent E5071C Network Analyzer or equivalent.  
\*Impedance for high-band = Match to client's chipset

ELECTRICAL PERFORMANCES

Tr1 S21 Log Mag 10.00dB/ Ref 0.000dB [F3]  
Tr2 S31 Log Mag 10.00dB/ Ref 0.000dB [F3]  
Tr3 S23 Log Mag 10.00dB/ Ref 0.000dB [F3]  
Tr4 S11 Log Mag 10.00dB/ Ref 0.000dB [F3]



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.

Description: 1608 Diplexer

PART NUMBER: DPX1608LKFBR2460A  
(Preliminary)

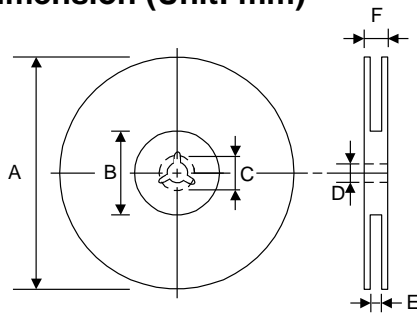
**PACKING SPECIFICATION**

**Peel-off force**



The force for peeling of cover tape is 10 grams in the arrow direction.

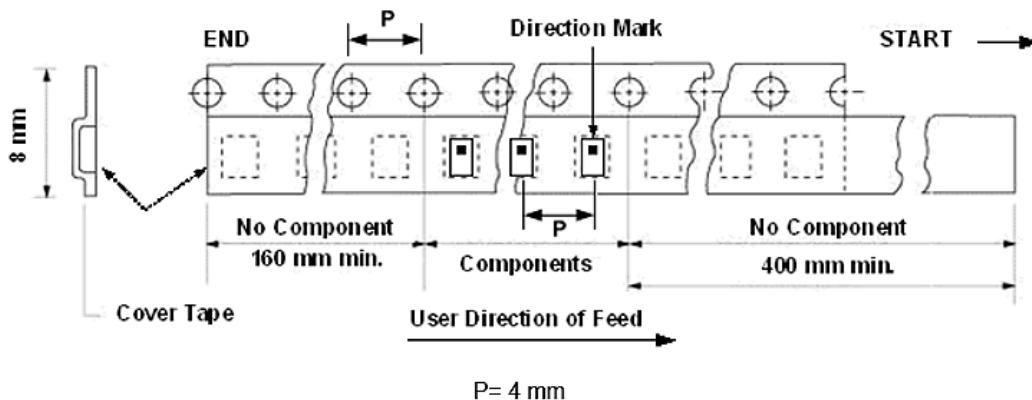
**Dimension (Unit: mm)**



TYPE	A	B	C	D	E	F
8 mm	178±1	60+0.5 -0	-	13±0.2	9±0.5	12±0.5
12 mm	178±0.3	60±0.2	19.3±0.1	13.5±0.1	13.6±0.1	-

**Taping quantity**

SERIES	5824 5724	5320 5220	4532	4516	3225	3216 2520	2012 1608	1005 0605
PCS/Reel	5000	3000	1000	2000	2500	3000	4000	10000



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.

**Description:** 1608 Diplexer**PART NUMBER:** DPX1608LKFBR2460A  
(Preliminary)**REVISION HISTORY**

Revision	Date	Description
Preliminary	Feb. 16, 2023	- New issue