

**Description**: 1608 Diplexer

PART NUMBER: DPX1608LKU2R2460L

### Features:

# **Applications:**

- Compact size
- Low loss
- High Soldering Heat Resistance

• WiFi 6E

### **ELECTRICAL SPECIFICATIONS**

#### Low-Band

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion loss (dB)	2400~2500	1	0.43	0.65
Return loss (dB)	2400~2500	10	18.6	-
	4800~7125	31	33.5	-
Attonuction (dP)	7200~7500	7200~7500 35 38.1 -	-	
Attenuation (dB)	7700~7950	30	33.1	-
	7500~12000	15	33.1	-

High-Band

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Inportion loss (dD)	5150~5875	-	0.55	1.25
Insertion loss (dB)	5875~7125	-	0.7	1.25
Return loss (dB)	5150~7125	10	-	-
	100~1000	35	56.7	-
	1000~2300	35	48.9	-
Attonuction (dD)	2400~2500	35	44.7	-
Attenuation (dB)	2700~3500	15	19.2	-
	9800~14250	25	30.2	-
	14700~21375	12	32.9	-

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### **ELECTRICAL SPECIFICATIONS**

#### Common

Item	Frequency Range (MHz)		Тур.	Max.
Deturn lose (dD)	2400~2500 10		18.5	-
Return loss (dB)	5150~7125	10	-	-

#### Isolation

Item	Frequency Range (MHz)	Min.	Тур.	Max.
	4800~5000	36	38.4	-
	5150~7125	33	37.7	-
Isolation (dB)	7200~7500	33	36.5	-
	9800~14250	20	37.2	-
	14700~21375	10	14.9	-

<sup>\*</sup>Impedance for high-band = Match to client's chipset

Operating Temperature Range: -40~85°C

Power Capacity: 3W max.

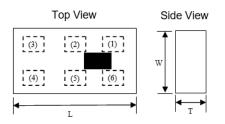


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### **MECHANICAL DIMENSION**

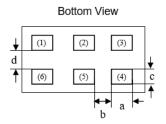
# **Outline**



### **Dimension**

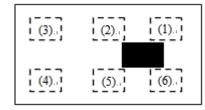
L	W	Т	а	
1.60±0.10	0.80±0.10	0.70 max.	0.35±0.05	
b	С	d		
0.22±0.05	0.225±0.05	0.22±0.05		

NOTE: Dimensions in mm.



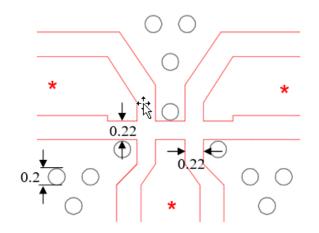
### **Termination**

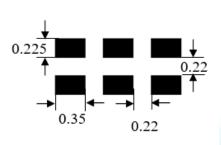
Top View



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

## Reference design of EVB





Unit: mm

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

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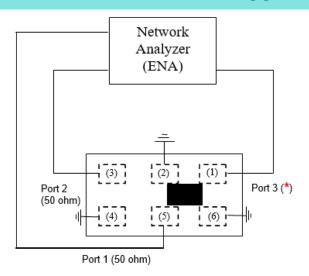




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# **MEASURING DIAGRAM**

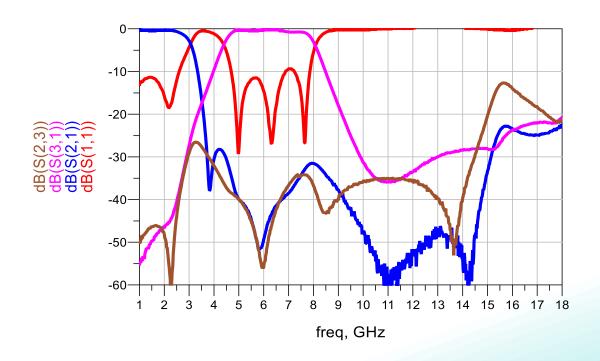


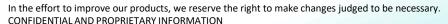
Test Instrument:

Agilent E5071C Network Analyzer or equivalent.

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

### **ELECTRICAL PERFORMANCES**









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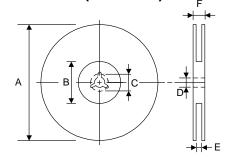
# **PACKING SPECIFICATION**

#### Peel-off force



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

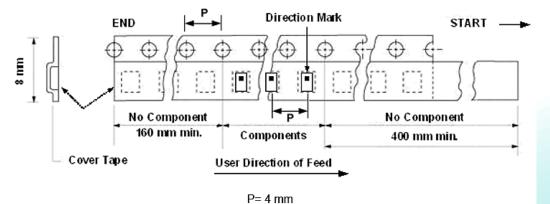
### **Dimension (Unit: mm)**



TYPE	A	В	С	D	E	F
8 mm	178±1	60+0.5		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



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ROHS



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		REVISION HISTORY
Revision	Date	Description
Version 1	May. 02, 2022	- New issue.
Version 2	Aug. 02, 2022	<ul> <li>Updated electrical specifications.</li> </ul>